U.S. And Canadian Not-For-Profit Acute Care Health Care Organizations

March 19, 2018

(Editor's Note: On May 15, 2020, we republished this criteria article to make nonmaterial changes. See the “Revisions And Updates” section for details.)

OVERVIEW AND SCOPE

1. This article describes S&P Global Ratings' methodology for assigning ratings and related credit products to U.S. and Canadian not-for-profit health care organizations. These criteria are implemented under the rating framework established in chart 1.

2. These criteria apply to U.S. and Canada-based not-for-profit acute care stand-alone hospitals and health care systems (together, "health care organizations"). For more information on our definition of health care systems, please see Appendix 3.

Key Publication Dates

- Original Publication Date: March 19, 2018
- Effective Date: Immediately
- These criteria address the fundamentals set out in "Principles of Credit Ratings," published on Feb. 16, 2011
METHODOLOGY

3. These criteria use the same major elements as our criteria for other municipal enterprise sectors. These criteria are guided by a framework that evaluates the enterprise risk (enterprise profile) and financial risk (financial profile) of a health care organization as the starting point for determining its rating. Chart 1 depicts how the enterprise and financial profile characteristics combine to reach the anchor. The stand-alone credit profile (SACP) is established after applying any applicable positive or negative overriding factors, caps, and holistic analysis to the anchor. The final outcome is reached after incorporating any other external factors.

4. We start our analysis with the assessment of a health care organization's enterprise and financial profiles. Within the enterprise and financial profiles, we consider a number of factors, and we assign an assessment to each factor. The classifications are: 'extremely strong' (the strongest), 'very strong', 'strong', 'adequate', 'vulnerable', or 'highly vulnerable' (the weakest), which equate to numeric assessments of '1' to '6', respectively. Since we believe that some factors are more likely to affect credit quality than others, we assign a weight to each of the enterprise and financial profile factors, as described in chart 1.

A. Framework

5. Our methodology for evaluating health care organizations classifies the primary credit factors that we review as part of either the enterprise profile or the financial profile. While many of an organization's activities affect both profiles, we believe our approach clearly identifies the various ways that strategic and operational activities affect an organization. For example, a capital building plan could improve the enterprise profile through enhanced facilities, while also resulting in higher operating or capital expenses. These impacts would be captured in both the enterprise and the financial profile, and if one of the effects is more dominant, we can identify that dynamic, and ultimately its impact on the rating, through the relative impact on the enterprise and financial profile assessments.
6. There are seven primary factors that we review: four enterprise profile factors and three financial profile factors. For a summary of the seven factors, see the section, "Primary Credit Factors".

7. We assign a designation to each factor, ranging from 'extremely strong' to 'highly vulnerable', equating to numeric assessments of '1' to '6', respectively. Since we believe some factors are more likely to affect credit quality than others, we assign a weighting to each, as shown in charts 2 and 3. After making any necessary adjustments to these assessments for unusual factors such as those outlined in tables 11 and 18, the final enterprise and financial profile assessments will be applied in table 1 to arrive at the suggested anchor. There may be circumstances in which we will assign an enterprise or financial profile assessment that is different from the assessment we calculate based on the individual factor assessments.

8. The analytical framework for the enterprise profile is shown in chart 2 with more detailed information available in the section, "Primary Credit Factors". The enterprise profile assesses the operating environment and incorporates broad industry factors as well as organization-specific factors. Market position receives the highest weight. While industry risk is assessed the same for all health care organizations, we believe a health care organization’s economic fundamentals, market position, and management and governance structure also establish conditions for operating and financial success. Once we determine the initial enterprise profile assessment, we may adjust it for unusual factors we believe will affect the enterprise profile in the future.

9. The analytical framework for the financial profile is shown in chart 3 with more detailed information available in the section, "Primary Credit Factors". The financial profile assesses the financial strength of the health care organization. We view both the statement of operations and balance sheet as important since operations and annual cash flow dictate debt service coverage levels and generate funding for capital and strategic initiatives. The balance sheet analysis sheds light on the organization's potential level of longer-term stability through analysis of unrestricted reserves, debt structure, and contingent liabilities. Once we determine the initial financial profile...
assessment, we may adjust it for unusual factors we believe will affect the financial profile in the future.

Chart 3

Analytical Framework For Financial Profile

<table>
<thead>
<tr>
<th>Financial Profile Assessment</th>
<th>Financial Performance (40%)</th>
<th>Liquidity and Financial Flexibility (30%)</th>
<th>Debt (30%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Total operating revenue</td>
<td>- Average age of plant</td>
<td>- Debt burden</td>
</tr>
<tr>
<td></td>
<td>- Earnings before depreciation, interest and amortization (EBIDA) margin</td>
<td>- Capital expenditures/depreciation expense</td>
<td>- Long-term debt/capitalization</td>
</tr>
<tr>
<td></td>
<td>- Operating margin</td>
<td>- Days' cash on hand</td>
<td>- Contingent liabilities/long-term debt</td>
</tr>
<tr>
<td></td>
<td>- Excess margin</td>
<td>- Unrestricted reserves/long-term debt</td>
<td>- Funded status of defined-benefit pension plan</td>
</tr>
<tr>
<td></td>
<td>- Maximum annual debt service (MADS) coverage</td>
<td>- Unrestricted reserves/contingent liabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Lease-adjusted MADS coverage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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10. The enterprise and financial profile assessments are combined to reach an anchor. This is done using table 1 above. There may be overriding factors or rating caps, which we may use to adjust what is suggested by table 1. Such overriding factors can positively or negatively affect the outcome suggested by table 1. For example, if a health care organization’s unrestricted reserves are extraordinarily high relative to operating expenses or debt, we may feel the resulting balance sheet cushion warrants a one-notch favorable adjustment to the anchor. Other conditions place a specific rating cap on the SACP. Rating caps are absolute, meaning that positive adjustments do
not allow ratings to exceed the cap. For additional details, see the section, “Overriding Factors And Rating Caps.”

11. We use lower case letters in table 1 to highlight that the outcomes in table 1 are not ratings themselves, but rather indicative credit levels suggested by the enterprise and financial profile assessments. In cases where table 1 presents two potential outcomes, the choice between the two outcomes is based on our forward-looking view of the factors composing the enterprise and financial profiles.

12. After we apply any relevant overriding factors and caps, we perform our holistic analysis. This helps us capture a more comprehensive analysis of creditworthiness and recognizes our forward-looking view of sustained, predictable operating and financial underperformance or overperformance, which may be informed by competitive analysis and sectorwide data, including ratio analysis. The holistic analysis includes rare, positive, or negative characteristics that the criteria do not separately identify. The holistic analysis can result in a one-notch improvement or worsening or no change at all. However, if a rating cap applies, for example, if the health care organization is emerging out of bankruptcy, resulting in a 'bb' category cap (see table 2), the holistic analysis cannot raise the SACP above the level of the cap.

13. The SACP reflects guidance from table 1 plus any relevant overriding factors and rating caps described in the section "Overriding Factors And Rating Caps" and the holistic analysis described above. For more information about SACPs, please see our criteria "Stand-Alone Credit Profiles: One Component Of A Rating", published Oct. 1, 2010.

14. Next we analyze the influence of external factors such as:

- Sovereign risk;
- For those that are part of a group, the potential for support to or from other group members; and
- The potential for extraordinary support or intervention from a related government.


16. Once the effect, if any, of external factors is incorporated, we arrive at the issuer credit rating (ICR). The ICR reflects the general creditworthiness of the entity and does not incorporate the pledge or covenants provided to bondholders for any particular debt instrument.

17. In the final step of the analysis, if we are rating a specific debt instrument, we review the legal structure of the instrument, including the pledge and covenants, to determine the issue credit rating. This analysis most often results in an issue credit rating that is the same as the ICR. However, the two may differ in some circumstances. For more information about how we determine issue credit ratings, see: "Assigning Issue Credit Ratings Of Operating Entities", published May 20, 2015.

B. Overriding Factors And Rating Caps

18. Certain conditions result in the SACP moving a specified number of notches above or below the anchor. Other conditions place a specific cap on the SACP. If multiple overriding conditions exist, which we expect to be rare, we would generally adjust the anchor by the net effect of those
conditions. However, rating caps are absolute, meaning that the positive relative adjustments described below do not allow SACPs to exceed the cap, and may not be raised above the cap through the use of holistic analysis. Depending on the severity of the condition, we could assign an SACP below the cap. Examples of these factors are outlined in table 2. On an exceptional basis, there may be additional situations that are not listed but could also result in rating overrides and rating caps.

Table 2
Examples Of Overriding Factors And Rating Caps To The Anchor

<table>
<thead>
<tr>
<th>Overriding condition that would generally:</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cap the SACP in the 'a' category</strong></td>
<td></td>
</tr>
<tr>
<td>Health care systems with less than 75 days' cash on hand.</td>
<td>SACP generally would be capped in the 'a' category.</td>
</tr>
<tr>
<td><strong>Cap the SACP in the 'bbb' or 'bb' category</strong></td>
<td></td>
</tr>
<tr>
<td>Stand-alone hospitals with less than 75 days' cash on hand.</td>
<td>SACP generally would be capped in the 'bbb' category except where unrestricted reserves exceed outstanding long-term debt. We may not apply these caps to a hospital with taxing authority if we believe the tax revenues sufficiently improve the stability of reserves.</td>
</tr>
<tr>
<td>Stand-alone hospitals with less than 50 days' cash on hand or unrestricted reserves less than 25% of existing or pro forma long-term debt.</td>
<td>SACP generally would be capped in the 'bb' category for organizations with less than 50 days' cash except where unrestricted reserves exceed outstanding long-term debt. The 'bb' category cap also generally would apply in cases where unrestricted reserves are less than 25% of long-term debt. We may not apply these caps to a hospital with taxing authority if we believe the tax revenues sufficiently improve the stability of reserves.</td>
</tr>
<tr>
<td>Health care organizations recovering from a financial crisis, emerging out of bankruptcy, receivership, or with significant consultant oversight following an event of default including a covenant violation. This also applies to organizations with a going concern audit.</td>
<td>SACP generally would be capped in the 'bb' category until the organization achieves resolution of the relevant oversight issues such as its covenant defaults and establishes a one-to-three-year record of sustainable financial performance.</td>
</tr>
<tr>
<td><strong>Cap the SACP in the 'b' category</strong></td>
<td></td>
</tr>
<tr>
<td>Health care organization's management demonstrates a lack of willingness to support debt or contingent liabilities or we believe the organization may be considering a bankruptcy or receivership filing.</td>
<td>SACP generally would be capped in the 'b' category.</td>
</tr>
<tr>
<td><strong>Notch the SACP up</strong></td>
<td></td>
</tr>
<tr>
<td>Health care organizations with greater than 365 days' cash or unrestricted reserves are greater than 3x existing or pro forma long-term debt.</td>
<td>SACP may be one notch higher than suggested by table 1.</td>
</tr>
<tr>
<td>Health care organization's academic medical center has a close relationship with a university.</td>
<td>SACP may be one notch higher than suggested by table 1 if the university is rated higher than the health care organization's initial indicative rating. If the university is not rated or rated lower than or equal to the health care organization's anchor, no positive adjustment is made.</td>
</tr>
</tbody>
</table>
Examples Of Overriding Factors And Rating Caps To The Anchor (cont.)

<table>
<thead>
<tr>
<th>Overriding condition that would generally:</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care organization has an ability to levy taxes.</td>
<td>SACP may be up to four notches higher than suggested by table 1. The number of notches is generally determined by a combination of size and wealth of the district population to the extent that it differs from the economic fundamentals assessment, diversity of the tax base, growth rate of assessment values, significance of tax revenues to total operating revenues, capacity for increased tax levies (both legally and politically), and durability of the taxing authority. In general, higher notching benefits are applied to those hospitals with a strong and growing tax base and where management demonstrates a willingness and ability to increase tax levies for operations.</td>
</tr>
</tbody>
</table>

**Notch the SACP down**

<table>
<thead>
<tr>
<th>Overriding condition that would generally:</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care organization’s management and governance assessment is &quot;vulnerable&quot; or &quot;highly vulnerable&quot;.</td>
<td>SACP is generally one notch lower than suggested by table 1 if management and governance is viewed as “vulnerable”, may be notched even lower if we believe this risk presents significant financial vulnerability, and is generally lowered multiple notches if management and governance is viewed as &quot;highly vulnerable&quot;.</td>
</tr>
<tr>
<td>Health care organization’s health plan capital adequacy levels are insufficient, leading to an actual or high likelihood of violating federal or state/province regulatory intervention levels.</td>
<td>SACP may be up to three notches lower than suggested by table 1. The number of notches is determined by a combination of health plan size, severity of capital inadequacy, and the likelihood and ability of financial support from related entities. To the extent expected losses are material to the health care organization, we will size those expected losses and include them in our financial profile assessment.</td>
</tr>
<tr>
<td>Stand-alone hospital with total operating revenue generally below $150 million, although this figure may be adjusted periodically for currency conversion or changing economic conditions.</td>
<td>SACP is generally one notch lower than suggested by table 1.</td>
</tr>
<tr>
<td>Stand-alone specialty hospitals with narrow revenue streams such as rehabilitation, orthopedic, oncology, long-term care, or psychiatric hospital. Children’s hospitals that have an atypically narrow service range or clinical focus will also be considered specialty hospitals.</td>
<td>SACP is generally one notch lower than suggested by table 1.</td>
</tr>
</tbody>
</table>

C. Primary Credit Factors

1. Guidelines For Assigning Analytical Assessments

19. If the assessment falls at or near a midpoint when scoring the enterprise or financial profile assessments (table 1), or at or near a cut-off for any component thereof, we generally assign the stronger assessment if trends are improving or we believe performance will improve. The weaker assessment generally is assigned if trends are weakening or we believe performance will weaken.

20. Our assessment of all factors in these criteria is based on our forward-looking view of the entity’s performance. Commonly, we begin our assessment by examining historical and current performance metrics, including the volatility and trend of historical results. Our view of future performance may differ from historical or current results. Our forward-looking view of a factor is informed by our opinion of macroeconomic, legislative, and regulatory conditions, as well as our
view of entity-specific factors such as capital plans, revenue stream trends, management actions, and the entity's own financial or long-range forecast.

21. Examples of situations where our forward-looking view will likely differ from what historical performance would suggest are:
   - A potentially large debt issuance;
   - Pending liability;
   - Likely acquisition, merger, or divestiture;
   - Plans to draw down internal reserves;
   - Significant legislative or regulatory changes;
   - Changes in accounting principles; or
   - A sizable and active turnaround plan underway.

22. Pro forma or projected data will be used based on our analytical assessment of the local and national environment for health care organizations, and may, but do not have to be, informed by a review of the organization's internal projections or pro forma expectations. In cases where these criteria require an assessment using absolute numbers in U.S. dollars, we may adjust these figures for currency conversion or changing economic conditions.

23. Our assessment of a health care organization's financial metrics is based on ratios and numbers derived from interim, audited, budgeted, and forecasted financial statements. These statements should reflect the operations of the health care organization and all other related companies under common control (the group), in accordance with "Group Rating Methodology". The rating will be based on our view of the group credit profile, which reflects the credit strength of the consolidated organization, and the obligated group's status within the group, which reflects its strategic importance to the group as a whole. In cases where an organization has multiple obligated groups seeking ratings, we would generally assign a rating to each obligated group based on the group credit profile and each obligated group's status within the larger consolidated organization. Absent structural enhancements like additional collateral or an insulated subsidiary, our assessment of the group credit profile will be the highest rating an obligated group could achieve.

24. In most cases, the historical ratio calculations are based on the three most recent periods of financial information as defined by three audits or two audits and interim data as long as at least one quarter of interim data (in a format that is generally comparable to the audit) is available. We may make reconciling adjustments to financial information to account for differences in reporting under U.S. generally accepted accounting principles (U.S. GAAP) and Canadian generally accepted accounting principles (Canadian GAAP) to ensure consistent treatment across our rating universe. In jurisdictions where audited financial statements are not the norm for this sector, we may accept certified or other forms of financial data if we deem the information quality of such statements meet our requirements for analysis, meaning we believe we have a sufficient quantity of information received on a timely basis from a source we consider reliable.

25. As an example of the financial statement weightings, when three audited periods are used, commonly the most recent audit would be weighted at 45%, the previous year's audit at 35%, and the audit period before that at 20%. Similarly, when interim-period data is included, commonly the interim data would be weighted at 20%, the previous year's audit at 45%, and the audited period before that at 35%. However, we may adjust these weightings to better reflect our assessment of the financial profile.

26. The benefit from increased economic, business, and geographic dispersion among members can
lower volatility of earnings for health care systems. As a result, we assess stand-alone hospitals using financial metric thresholds that are generally more robust than the thresholds we use to assess health care systems.

2. Enterprise Profile

a) Economic Fundamentals (20% weighting)

27. The economic fundamentals assessment measures the viability of the health care organization's demographic and economic stability across its overall service area which could include one or a few distinct markets. Overall, we believe that economic fundamentals influence a health care organization's payer mix, amount and type of capital spending, available pool of patients, and philanthropic support, all of which in turn directly affect the level of revenue available for debt service payments currently and in the future. In our opinion, the economic fundamentals of a service area also influence management's overall strategy.

28. Because of the inherent differences between a health care system and a stand-alone hospital, which is typically located in a single market, we use different assessment approaches to evaluate economic fundamentals.

Economic Fundamentals -- Stand-Alone Hospitals

29. For stand-alone hospitals operating largely within a single region, we use table 3 to assess the population of the primary service area.

Table 3

<table>
<thead>
<tr>
<th>Economic Fundamentals Assessment For Stand-Alone Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Strong</td>
</tr>
<tr>
<td>&gt;1.5 million</td>
</tr>
</tbody>
</table>

30. In making our economic fundamentals assessment, we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in an economic fundamentals assessment that is stronger or weaker than that indicated in table 3.

31. We will generally not make positive adjustments for those hospitals with small primary service area population, which we generally consider 100,000 or less.

32. Examples of positive economic considerations include:

- Population growth in the primary service area at a rate meaningfully higher than regional or national levels, which we typically consider 2x or greater than the projected national growth rate over the next five years;

- Employment growth in the primary service area is projected to be meaningfully higher than regional or national levels, which we typically consider 150% or higher than the projected national growth rate over the next five years;
- Per capita personal income in the primary service area is projected to be meaningfully higher than regional or national levels, which we typically consider greater than 125% of the projected national per capita personal income in five years; and
- An ongoing, stabilizing institutional influence such as the presence of a major state or flagship university, state or provincial capital, military base, or large employer.

Examples of negative economic considerations include:
- Population in the primary service area is projected to decline over the next five years;
- Employment growth in the primary service area is projected at a rate meaningfully lower than regional or national levels, which we typically consider to be half or less than the regional or national growth rate over the next five years;
- Per capita personal income in the primary service area is projected to be meaningfully lower than regional or national levels, which we typically consider 75% of the projected regional or national per capita personal income in five years; and
- Primary service area employment concentration where an individual sector or one employer represents a significant part of the employment base, but is not considered a stabilizing institution.

Economic Fundamentals -- Health Care Systems

Health care systems are typically spread across many regions and are inherently less reliant on the specific demographics of a single region. Therefore, we will assess the economic profile on a macro basis, focusing on a system's economic characteristics compared to national trends and its ability to offset the weaknesses of one or multiple markets with the strengths of others (see table 4).

We generally assess economic fundamentals for health care systems more favorably than stand-alone hospitals because of certain characteristics that systems match to meet the definition of a health care system under these criteria. Specifically, a system must operate in at least three distinct markets, which mitigates reliance on an individual market's demographic profile. Also, the system must have limited reliance on a single market, which typically results in strong geographic and economic diversity that is less reliant on the general economic characteristics of one market.

Table 4 details typical characteristics of health care systems at each of the six assessment levels for economic fundamentals. In general, we assess each factor in table 4 by looking at the variety of factors cited and use a preponderance of factors to determine the initial assessment. Where the range of assessments is combined, such as 'extremely strong' and 'very strong', we evaluate the overall preponderance of factors and our view of the organization's relative strengths within the range using both historical and projected evidence.
Table 4

Economic Fundamentals Assessment For Health Care Systems

<table>
<thead>
<tr>
<th>Extremely Strong or Very Strong</th>
<th>Strong or Adequate</th>
<th>Vulnerable or Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A health care system operating in one or a few distinct markets that have healthy demographic characteristics, such as population growth, employment diversity, or high income levels that result in overall economic characteristics generally mirroring or exceeding national conditions. A system's economic fundamentals could be considered 'extremely strong' or 'very strong' despite weak economic conditions in one or a few material markets as long as they are offset by strengths in other key markets.</td>
<td>A health care system operating in one or a few distinct markets that have demographic characteristics characterized by generally stable population, some employment concentration, or average income levels that result in overall economic characteristics generally mirroring or slightly below national conditions. A system's economic fundamentals could be considered 'strong' or 'adequate' despite weak economic conditions in one or a few material markets as long as these are somewhat offset by strengths in other markets.</td>
<td>A health care system reliant on one or multiple service areas where overall economic characteristics are well below national trends or have exhibited declining trends that are expected to continue.</td>
</tr>
</tbody>
</table>

37. The health care sector in general tends to be only moderately sensitive to economic cycles. However, hospitals are not businesses that are easily portable, and changes in local demographics, or changes in medical care delivery patterns, like the decades-long shift to more outpatient procedures and shorter hospital stays, can affect demand for hospital services over time. Some local markets that once had sufficient demand to support several hospitals now only have demand to support one or two, while other markets have experienced increased demand for medical services with aging, growing, or disease-prevalent populations.

b) Industry Risk (20% weighting)

38. Industry risk measures risk in each sector and allows comparisons across sectors. We assign the same standard industry risk assessment to all health care organizations and do not make a distinction between industry risk for health care systems and stand-alone hospitals.

39. Industry risk reflects factors that are common to the health care industry such as cyclicality, competition, regulation, and barriers to entry. While we believe health care organizations exhibit certain characteristics related to size, dispersion, diversity, and structure that can potentially mitigate portions of industry risk, these benefits are reflected in the other three enterprise profile factors.

40. The hospital industry is highly regulated. Hospitals are required to comply with numerous regulatory standards at federal, state/provincial, and local levels. The high level of regulation is, in our view, an indication of the public perception that hospitals have an essential purpose. On the other hand, regulation and public policies generally do not guarantee the survival of any particular hospital, although there have at times been government interventions to prevent hospital closures. The regulatory framework can reduce risk in certain states or provinces by limiting competition. However, failure to meet regulatory and governmental accreditation guidelines can also have catastrophic consequences and substantially impair credit quality. Our ratings and industry risk assessments are calibrated to seek a balance between our view that the sector is essential and the fact that each individual hospital is not guaranteed survival.

41. We believe the health care industry in the U.S. and Canada, including for-profit and not-for-profit health care organizations, represents ‘intermediate’ credit risk when compared to other industries and sectors, which equates to ‘strong’ or ‘3’ on the ‘1’ to ‘6’ scale used for these criteria. The industry risk assessment of intermediate risk applies to all health care organizations rated by
these criteria regardless of where they operate.


c) Market Position (50% weighting)

43. Market position measures a health care organization’s demand relative to its competitors. Market position has the highest weight (50%) in the enterprise profile assessment because a robust market position allows health care organizations, in our opinion, to successfully operate through economic cycles over long periods of time, assuming other factors such as cost and quality are in line with its competitors. Conversely, a weak market position or a concentration of revenue sources can result in poor performance due to the presence of stronger competitors or reliance on one or a few locations or service lines that may be negatively affected by business, economic, or regulatory conditions. These criteria use specific measures to evaluate market position to determine the initial assessment.

44. Because of the inherent differences between a multisite health care system and a stand-alone hospital, which is typically located in a single market, we use different assessment factors to evaluate market position.

Market Position – Stand-Alone Hospitals

45. Key considerations for evaluating a stand-alone hospital’s market position include:
   - Market share, competition, and demand;
   - Medical staff;
   - Payer mix; and
   - Clinical quality.

46. We evaluate each of these four factors and assign an assessment ranging from 'extremely strong' to 'highly vulnerable' to each one. We then evaluate the four assessments as well as our holistic view of the hospital's market position to form our overall assessment of market position, ranging from 'extremely strong' to 'highly vulnerable'. Within these factors, we generally consider market share, competition, and demand to be the most important factor in our overall assessment of market position, while medical staff, clinical quality, and payer mix are generally secondary factors.

Market share, competition, and demand

47. Market share is defined as the percentage of primary service area admissions that are admitted to a specific hospital. Higher market share has historically been an indicator of a hospital's essentiality and contracting leverage, however some hospitals have unique credit strengths (described below), where market share itself doesn't fully represent the heft of the organization's market position. Health care reform pressures have prompted the industry to focus on cost and quality measures and move toward a value-based model where higher admissions may not necessarily be financially beneficial. Certain management teams, medical staff, and local insurers may be more forward-looking than others. Because of the uncertainties and the high degree of change in the industry, particularly in the U.S., it is difficult to project at what point additional volume is beneficial or harmful. However, we believe that market share still remains a relevant
measure for traditional inpatient providers and we will assess it initially as shown in table 5.

48. For single-specialty providers and children's hospitals, market share considers the hospital's share of the single specialty or service niche only.

49. While absolute market share in a defined primary service area is important, it is also important to determine the hospital's relative strengths within the service area to better understand future trends. Hospitals with a trend of rising patient volume would be more likely to report strengthening financial performance, especially in a market with traditional payer characteristics. Conversely, an expected decline in patient volume could begin to affect the financial position over the long term, especially if management does not adjust the expense base correspondingly or unless the market payment mechanisms shift to value from volume. To the extent that a hospital is further along the path to value, market share may be deemphasized while medical staff integration, payer mix, and clinical quality will become more important rating factors.

50. We recognize that the percentage of revenue from inpatient admissions is declining, with outpatient volume accounting for half of total operating revenue at many hospitals. While the counting and reporting methodology for outpatient statistics is not comparable across hospitals, equivalent admissions can be used as a more comprehensive measure of all volume based on the relationship between inpatient and outpatient revenue. As the trend toward more outpatient care continues, we believe this will become an increasingly important predictor of business demand and will use this metric, along with inpatient admissions, to determine trends in overall volume.

51. The absolute trend of increasing or decreasing admissions usually but not always correlates to market share trends. Therefore, it is important to look at market share trends and recognize those hospitals with increasing market share, even though volumes may be declining in a contracting market. Conversely, in a growing market, volumes may be increasing, but if the pace is not as fast as market growth, market share will shrink. Also important is the rate of shift from inpatient to observation status and outpatient treatment, which can affect market share and may vary by individual hospital within a market or from region to region depending on physician practices.

Table 5

<table>
<thead>
<tr>
<th>Primary Service Area Population</th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1.5 million</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>500,000 - 1.5 million</td>
<td>&gt;45%</td>
<td>35%-45%</td>
<td>25%-35%</td>
<td>15%-25%</td>
<td>10%-15%</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>350,000 - 500,000</td>
<td>&gt;60%</td>
<td>50%-60%</td>
<td>40%-50%</td>
<td>30%-40%</td>
<td>20%-30%</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>150,000 – 350,000</td>
<td>&gt;75%</td>
<td>60%-75%</td>
<td>50%-60%</td>
<td>35%-50%</td>
<td>25%-35%</td>
<td>&lt;25%</td>
</tr>
<tr>
<td>100,000 – 150,000</td>
<td>&gt;70%</td>
<td>60%-70%</td>
<td>45%-60%</td>
<td>35%-45%</td>
<td>&lt;35%</td>
<td></td>
</tr>
<tr>
<td>&lt;100,000</td>
<td>N/A</td>
<td>N/A</td>
<td>&gt;65%</td>
<td>50%-65%</td>
<td>40%-50%</td>
<td>&lt;40%</td>
</tr>
</tbody>
</table>

N/A--Not applicable.

52. Stand-alone hospitals serving populations of over 1.5 million can have unique market share strengths not always quantifiable by market share data. These typically urban markets are often fragmented and successfully support multiple stand-alone hospitals with relatively low market share. In addition, urban areas frequently have specialty hospitals and academic medical centers with broad regional, state-wide, national, and even international draw which makes analysis of primary service area population less relevant. When a hospital has these unique market share
strengths, the market share, competition, and demand assessment will be evaluated as either 'extremely strong', 'very strong', or 'strong', based on a preponderance of factors described below:

- The assessment generally will be 'extremely strong' when the service area population is 5 million or more; there is no meaningful excess capacity in the primary service area; the hospital is an academic medical center or specialty provider that offers unique teaching, research, and patient care services not found at many hospitals in the region; or the provider is a hospital district that serves a unique community need and is strongly supported by tax revenue.

- The assessment generally will be 'very strong' when the market share, competition, and demand characteristics do not qualify for 'extremely strong' but are stronger than 'strong'.

- The assessment generally will be 'strong' when the service area population is under 3 million; there is some excess capacity in the primary service area; the hospital is an academic medical center or specialty provider with a combination of unique and generally available teaching, research, and patient care services; or the provider is a hospital district that serves a unique community need.

For those hospitals serving populations of over 1.5 million that don't have the unique strengths described above, we will generally assess market share, competition, and demand as 'extremely strong' for those stand-alone hospitals that have a market share of 30% or greater, 'very strong' for those in the range of 25%-30%, 'strong' for those in the range of 15%-25%, 'adequate' for those in the range of 8%-15%, 'vulnerable' for those in the range of 3%-8% and 'highly vulnerable' for those with 3% or less market share.

In making our assessment of market share, competition, and demand, we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a market share, competition, and demand assessment that is stronger or weaker than that indicated in table 5.

Examples of positive market position, competition, and demand considerations include:

- Projected increase in inpatient admissions, which we typically consider 15% over the next five years measured on the same set of assets;

- Projected increase in equivalent admissions, which we typically consider greater than 20% over the next five years;

- A high ratio of equivalent admissions to inpatient admissions, which we typically consider greater than 3.5;

- Increase in primary service area market share over the past five years, which is typically greater than 2.5% and we believe is permanent;

- Sole provider of a mainstream key clinical service such as obstetrics, cardiac surgery, or oncology or an unusually broad service area definition due to the breadth of patient draw or unique services; or

- Location in a state or province where laws effectively limit competition by requiring government approval for construction projects and equipment acquisition; or

- Measures of elevated inpatient occupancy, indicating high demand for services.

Examples of negative market position, competition, and demand considerations include:

- Projected decline in inpatient admissions, which is typically greater than 5% over the next five years measured on the same set of assets;
years, or recent history of declining inpatient admissions, which is typically greater than a year-over-year change of 5% over a multiyear period measured on the same set of assets;

- No year-over-year growth in historical (over a multiyear period) or projected, equivalent admissions measured on the same set of assets;

- Year-over-year decline in primary service area market share over a multiyear period, which is typically greater than 2.5% and we believe is permanent;

- Excess hospital capacity in the service area as measured by low occupancy, generally defined as less than 60%; or

- Narrowly drawn service area, which may artificially boost market share.

We will generally not make positive adjustments for those hospitals with small primary service area populations of generally 100,000 or less because of the risks inherent in operating in a small service area, including employment concentration, a likely reliance on a small physician base, and increased turnover and recruitment risk.

**Medical staff**

Because hospitals cannot operate without physicians, a hospital's financial stability partially depends on management’s relationship with its physicians and the organization's ability to attract, retain, employ, and integrate with physicians. The quantity and type of physicians needed at any given hospital depends on the nature of services provided. Being able to recruit the required number of physicians can contribute to improved market position and financial performance.

Our assessment of the medical staff considers three sub-factors:

- General medical staff characteristics;

- Medical staff competition; and

- Recruitment, retention, and employment.

Table 6 provides typical characteristics of the medical staff for stand-alone hospitals at each of the six assessment levels. In general, we assess each factor in table 6 by looking at the variety of factors cited and use a preponderance of factors to determine the initial assessment. Where the range of assessments is combined, such as 'extremely strong' and 'very strong', we evaluate the overall preponderance of factors and our view of the organization's relative strengths within the range using both historical and projected evidence.
Table 6

Medical Staff Assessment For Stand-Alone Hospitals

<table>
<thead>
<tr>
<th>General Medical Staff Characteristics</th>
<th>Extremely Strong or Very Strong</th>
<th>Strong or Adequate</th>
<th>Vulnerable or Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The active medical staff is large and growing with appropriate depth, breadth, and quality of staff. The hospital is not overly reliant on any one physician for its volume. Physicians are loyal to the hospital and support management and governance efforts.</td>
<td>The active medical staff is adequate in size and stable, but lacks depth and breadth in a few specialties. Quality of the medical staff is adequate and the physicians are moderately engaged with management and governance. The hospital is somewhat more reliant on a few physicians or groups of physicians.</td>
<td>The active medical staff is small and potentially shrinking. Physicians do not significantly participate in management and governance initiatives. The hospital is reliant on a small number of key admitters for a majority of revenue, leaving it vulnerable to physician turnover.</td>
</tr>
<tr>
<td>Medical Staff Competition</td>
<td>Two-thirds or more of the medical staff do not have privileges at other hospitals and do not independently offer services that compete with the hospital’s clinical services.</td>
<td>There are multiple practice options in the service area. Many medical staff members have privileges at more than one hospital. Medical staff members participate in ventures that compete with the hospital’s clinical services.</td>
<td>There is abundant competition from physicians in the service area, including but not limited to physician-owned single-specialty hospitals, ambulatory surgery, or imaging centers. There is evidence of a strained relationship between the medical staff and management. Physicians are members of multiple medical staffs and have demonstrated willingness to shift business between hospitals.</td>
</tr>
<tr>
<td>Medical Staff Recruitment, Retention, and Employment</td>
<td>The medical staff is largely employed, or for academic medical centers, the faculty is under direct control of the hospital. Physicians are easily attracted to the hospital and management follows a detailed physician recruitment plan. The hospital has dedicated management resources, information technology, an established integration infrastructure, and financial support for its employed physicians.</td>
<td>The employed medical staff accounts for about half of all volume. There may be some difficulty recruiting physicians, but it is not pervasive and is confined to just certain harder-to-find disciplines. Management provides oversight of its employed physicians, but it is not dedicated support, and the physician/hospital relationship is loosely developed.</td>
<td>Management reports that it has difficulty recruiting physicians and is reliant on temporary staff. For hospitals that employ physicians directly, the management of the physicians is not coordinated, and there are limited resources available to monitor operations and financial performance. Very limited physician integration is underway.</td>
</tr>
</tbody>
</table>

In making our assessment of medical staff, we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a medical staff assessment that is stronger or weaker than that indicated by table 6.

Examples of positive medical staff considerations include:
- Fully integrated medical staff;
- Closed faculty practice plan at an affiliated medical school that is responsible for a majority of patient volumes, even without an integrated management team; or
- Medical staff with over 500 active physicians.

63. Examples of negative medical staff considerations include:

- Evidence of significant medical staff turmoil;
- Physician admission concentration especially at hospitals with fewer than 7,500 admissions annually; or
- Average age of leading admitting physicians greater than 55, especially at hospitals with fewer than 7,500 annual admissions.

**Payer mix**

64. A hospital's payer mix is dictated by its location, services provided, mission, physicians, and characteristics of the service area population. Payer mix directly affects earnings and its trend identifies potential risks for the hospital.

65. Medicaid and Medicare, both government-sponsored payers in the U.S., typically have reimbursement rates below commercial insurers. Medicaid is often subject to cuts or eligibility changes as a result of state and federal policy changes. Medicare in general offers rates that while below commercial payers, are typically better than Medicaid rates. Reliance on Medicare and Medicaid for a majority of revenue, when these programs often pay below cost, is a risk because costs must then be covered by substantially higher rates from commercial payers.

66. A high concentration of net patient service revenue (NPSR) in a single payer also represents a credit risk because a contract could be terminated, the insurer could exit the market or be acquired by another insurer, and the payment terms can change materially from contract to contract. Conversely, a well-diversified payer mix represents credit strength because health care organizations are not reliant on any one payer for a large percentage of its revenue, and the loss of a contract, while disruptive, can usually be managed over time.

67. The payer mix assessment for Canadian hospitals will generally be 'extremely strong', reflecting the fact that the Canadian health care system depends on stable, reliable, and predictable sources of funding, provided by the provincial governments, which also set the rates for all hospitals. Likewise, health care organizations in U.S. states where rates are set for all payers by the legislature or state commission would generally be assessed 'extremely strong'.

68. In assessing the payer mix, contract negotiation strategies, payment basis of the contract, and any demographic changes that are likely to shift the payer mix such as an aging population, will be considered.

69. We view positively health care organizations pursuing, preparing for, and entering into performance-based contracts, including capitated, value based, shared risk, bundled accountable care, or quality-based contracts. Because we believe these contracts are becoming more prevalent, health care organizations that anticipate this change and enter into these types of contracts in advance of wide-scale adoption, can gain experience in putting the necessary processes, information technology (IT), controls, and procedures in place to maximize potential incentives. While there may be both short-term and long-term transition and other risks associated with this strategy--for example, incentives to reduce hospitalization could in turn reduce NPSR--we believe organizations involved with these contracts now could be better prepared in the future. While treated as a positive in this payer mix section, if these contracts hurt profitability, the downside would be captured in the financial profile analysis.

70. Table 7 provides typical payer mix characteristics for stand-alone hospitals at each of the six
assessment levels. In general, we assess each factor in table 7 by looking at the variety of factors cited and use a preponderance of factors to determine the initial assessment. Where the range of assessments is combined, such as 'extremely strong' and 'very strong’, we evaluate the overall preponderance of factors and our view of the organization’s relative strengths within the range using both historical and projected evidence.

Table 7

|                        | Extremely Strong or Very Strong | Strong or Adequate | Vulnerable or Highly Vulnerable |
|------------------------|--------------------------------|-------------------|
| **Governmental payers**| NPSR from Medicare is less than 25%. NPSR from Medicaid is less than 5%. | NPSR from Medicare is between 25% and 50%. NPSR from Medicaid is between 5% and 20%. | NPSR from Medicare is greater than 50%. NPSR from Medicaid is greater than 20%. |
| **Nongovernmental payers and payment diversity** | Solid commercial relationships and contracts including contracts which are incentive and performance based. Commercial contracts typically account for more than 55% of NPSR. | Stable, but not robust, relationships and contracts with payers which typically account for 30% to 55% of NPSR. Modest amount of incentive- and performance-based contracts, but most remain fee for service. | Record of inconsistent or weak reimbursement from commercial payers with very limited exposure to alternate contracting methodologies. Commercial contracts typically account for less than 30% of NPSR. |

In making our assessment of payer mix we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a payer mix assessment that is stronger or weaker than that indicated by table 7.

Example of a positive payer mix consideration:

- Ownership of a health plan which accounts for a sizable percentage of an organization’s revenue and its customer base is not heavily weighted toward government programs relative to the overall payer mix of the health care organization. We take a holistic view of the health plan and will consider its viability when determining whether to take this adjustment.

Examples of negative payer mix considerations:

- Lack of a contract with the leading health insurer in the market, as measured by enrollees;
- High reliance on Medicare and Medicaid, which we typically consider to be more than 70% of NPSR combined, would generally be assessed ‘highly vulnerable’;
- High reliance on Medicaid, which we typically consider to be more than 30% of annual NPSR, would generally be assessed ‘highly vulnerable’; or
- High reliance on a single nongovernment payer, which we typically consider to be more than 40% of NPSR, would generally be assessed ‘highly vulnerable’.

Clinical quality

Performance on clinical quality metrics, the ability to track, document, and standardize clinical actions and results through IT, and dissemination of quality results to physicians, payers,
regulators, and the general public are becoming increasingly important, not only from a consumer perspective, but also because reimbursement levels increasingly depend on a provider’s ability to document its clinical quality.

75. Medicare, commercial payers and states, through Medicaid, are increasingly adding performance-based bonuses and penalties to their reimbursement arrangements.

76. Transparency related to clinical quality performance and patient satisfaction is increasing, with numerous sources of information now available to consumers. The availability of information and the growing amount of out-of-pocket expenses borne by consumers, including those in high-deductible health plans in the U.S., increase the likelihood that a hospital’s performance on reported quality measures will drive consumer decisions about where to seek health care.

77. As payments to hospitals become increasingly tied to quality performance measures, and transparency makes it easier for consumers to use reported information to make decisions about where to seek health care, a hospital’s patient volumes and revenues could be positively or negatively affected.

78. To gauge quality, we will use various measures that we believe are aligned with nationally recognized standards that are consistently calculated and reported across the country. These measures may include, but are not limited to, information from Medicare, the Joint Commission, or the Malcolm Baldridge Award. For health care systems with multiple hospitals and/or with broad geographic coverage, we will review regional or national clinical quality data as it is available. We will also review various other sources of data independently gathered or provided by management to inform our assessment.

79. Table 8 provides typical clinical quality characteristics for stand-alone hospitals at each of the six assessment levels. In general, we assess each factor in table 8 by looking at the variety of factors cited and use a preponderance of factors to determine the initial assessment. Where the range of assessments is combined, such as ‘extremely strong’ and ‘very strong’, we evaluate the overall preponderance of factors and our view of the organization’s relative strengths within the range.

80. We generally assess Canadian and other hospitals that are not required to report on clinical quality measures as on par with national averages, resulting in a ‘strong’ assessment, unless we have evidence to believe otherwise.

Table 8

<table>
<thead>
<tr>
<th>Clinical Quality Assessment For Stand-Alone Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extremely Strong or Very Strong</strong></td>
</tr>
<tr>
<td>Clinical Quality Metrics:</td>
</tr>
<tr>
<td>Evidence of high quality rankings on objective nationally recognized measures. Consistently favorable media coverage for clinical quality results.</td>
</tr>
<tr>
<td>Quality Performance Incentives:</td>
</tr>
<tr>
<td>Consistently earns the maximum incentives or bonuses available under clinical quality-related performance clauses of commercial and government payer arrangements.</td>
</tr>
<tr>
<td><strong>Strong or Adequate</strong></td>
</tr>
<tr>
<td>Average quality rankings on objective nationally recognized measures. Receives mixed media coverage for clinical quality results.</td>
</tr>
<tr>
<td>Small incentive payments or penalties, below the maximum under payer arrangements, are typical.</td>
</tr>
<tr>
<td><strong>Vulnerable or Highly Vulnerable</strong></td>
</tr>
<tr>
<td>Inconsistent or weak quality rankings on objective nationally recognized measures. Poor clinical performance has resulted in negative media coverage.</td>
</tr>
<tr>
<td>Typically receives penalties under payer arrangements for quality-related performance.</td>
</tr>
</tbody>
</table>

81. In making our assessment of clinical quality we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels.
These additional considerations could result in a clinical quality assessment that is stronger or weaker than that indicated by table 8.

**Market Position – Health Care Systems**

82. Key considerations for evaluating a health care system's market position include:

- Diversity, such as its geographic footprint, sources of revenue, and business line diversity;
- Integration and scale, such as centralization of management, IT strategy, and key corporate functions; and
- Market specific considerations, such as market leadership, competitive dynamics, relationships with third-party payers, quality, and physician integration.

83. In general, we consider diversity to be the most important assessment within market position as diversity is a hallmark of health care systems and is critical to risk mitigation. Market-specific considerations are less important for large multistate and national systems but almost as important as diversity for a regional or single-state system. Integration and scale is another important consideration because the efficacy of an organization's structure can significantly influence clinical and financial operations.

**Diversity**

84. Health care systems generally have lower risk than stand-alone hospitals because of their inherent diversity across multiple hospitals or operating units. This diversity can reduce threats associated with doing business in a single facility, market, state/province, region, or economy. In our opinion, broader diversity helps a health care system withstand economic, competitive, or technological threats better than its stand-alone peers.

85. Some health care systems have strength and depth in key regional markets that provide them with competitive advantages, including negotiating leverage with insurers, opportunity to rationalize services across campuses in nearby locations, and the ability to attract staff and physicians. The concentration of business volumes and revenues within a particular region can lead to greater exposure to economic factors, although all health care systems have less exposure to this concentration when compared to stand-alone hospitals.

86. Some health care systems may lack a strong regional market position but have broadly diverse locations and business lines, minimizing risks related to a single market, such as demographic, state/province and local regulatory, or reimbursement changes. These systems also can leverage their large size to spread overhead across a wider base, aggregate their purchasing power to negotiate better rates with suppliers and vendors, and spread best practices across health care organizations. However, there are also rare occasions when a health care system may have a weak market position in a majority or all of its markets. In these cases, diversity typically will be assessed at a lower level.

87. Those systems with significant nonacute business lines such as health insurance plans, large integrated medical groups, long-term care, or a strong relationship with a university also achieve a level of diversity that can offset some risks unique to the acute care business. For example, provider-sponsored health plans and growth of medical groups through employment or foundation models are increasingly prevalent within systems, and for some stand-alone hospitals as well, as they respond to the changing dynamics of the U.S. health care delivery system. Ownership of a health insurance plan or the presence of a large medical group can skew certain
financial ratios, which we will take into account, however these businesses can also contribute to health care systems' geographic and financial dispersion and can provide access to skills and data that a health care system may not have otherwise.

Where applicable, we also evaluate the potential benefits derived from joint ventures, including evaluation of the services provided in the joint venture, partners to the joint venture, participation in venture capital funds, and the percentage ownership of the venture's partners. The relative significance of the joint venture and its importance to the health care system's strategy will be a factor in determining its potential benefits to diversity and depth and breadth of services.

Integration and scale

For all types of health care systems, the ability of management and governance to centrally control and manage all components of the organization is becoming increasingly important. With significant industry cost and reimbursement pressure, coupled with increasing focus on quality of care, we believe it is important for organizations to set a single and integrated standard for each of its operating divisions under a common vision. This would allow the organization to achieve its overall vision and mission. For systems that are extremely decentralized, we believe benefits of being a system can be muted and will reflect that in our assessment.

Market-specific considerations

Market-specific considerations include a health care system's:

- Leadership position in a given market or set of markets, as measured by market share and other utilization data;
- Organizational readiness to address local, state/provincial, and national health care market place trends;
- Level of medical staff integration, as well as the ability to centrally manage physicians and share best practices across the entire health care system;
- Payer mix; and
- Evidence of quality rankings.

We have outlined below typical market position characteristics of health care systems associated with Diversity, Integration and Scale, and Market-Specific Considerations at each of the six assessment levels. In general, we assess market position by looking at the variety of factors cited and use a preponderance of factors to determine the market position assessment. Where the range of assessments is combined, such as 'extremely strong' and 'very strong', we evaluate the overall preponderance of factors and our view of the organization's relative strengths within the range using both historical and projected evidence.

The market position would likely be assessed as 'extremely strong' or 'very strong' if the health care system generally exhibited a combination of the following characteristics:

Diversity

- Broad geographic reach in its relevant local, state or multi-state market with limited reliance on a single market for revenue;
- Strong demand for systemwide services in a majority of economically diverse markets;
- Robust service line diversity such as non-acute care, joint ventures, or a provider-sponsored health plan; and
- Extensive variety of access points for system services.

Integration and Scale
- Highly centralized corporate functions;
- Streamlined board oversight of operations, strategy, and finance across the entire system;
- Management demonstrates highly effective sharing of best practice across the system in areas such as leadership, physician relations, quality, clinical services and operations;
- Strong bargaining position leads to favorable negotiations with payers and suppliers; and
- Favorable staff and physician recruiting, retention, integration, and engagement efforts.

Market-Specific Considerations
- Leadership position in a given market or set of markets, as measured by market share;
- Integrated medical staff as evidenced by presence of a centrally managed large multispecialty group physician practice or preponderance of employed physicians;
- Pioneer-like efforts to address changing health care market dynamics and trends;
- Evidence of high quality rankings across most affiliates; and
- Strong payer mix as evidenced by limited reliance on government payers, solid commercial relationships and contracts in line with industry trends, or a majority of assets located in a state where rates are set for all payers by legislative or state commission.

The market position would likely be assessed as 'strong' or 'adequate' if the health care system generally exhibited a combination of the following characteristics.

Diversity
- Some geographic reach, with system operations in several markets and some reliance on one or a few for a greater portion of total operating revenue;
- Stable demand for services with selective growth or contraction in a few markets but not all;
- Sufficient service line diversity; and
- Some growth plans in new or existing markets.

Integration and Scale
- Moderately centralized functions with some corporate functions embedded at the subsidiary level but a majority led at the corporate level;
- Board oversight of many operational, strategic and financial functions with local boards focused largely on medical staff accreditation, quality, and philanthropy but there is some
duplication between subsidiary and system-level governance;
- Management's sharing of best practices to subsidiaries is effective and fairly comprehensive;
- Moderate bargaining position; and
- Some challenges, perhaps only in select locations, when recruiting for staff and physicians.

**Market-Specific Considerations**
- Relevant, but not leading, market share in a given region or set of regions;
- Healthy, but not tightly aligned, relationships with medical staff;
- Evidence of preparation for changing health care dynamics and trends, although some initiatives may not be fully formed;
- Average, but not high ranking quality metrics at most affiliates; and
- Adequate payer mix somewhat reliant on government or specific payers and a stable, but not fully aligned, relationships and contracts with payers.

The market position would likely be assessed as 'vulnerable' or 'highly vulnerable' if the health care system generally exhibited a combination of the following characteristics.

**Diversity**
- Reliance on a small service area, which could also be demographically weak, for a majority of operating revenue;
- Declining demand in most markets for system services;
- Focus on acute-care operations only; and
- Shrinking service lines and access points in key locations.

**Integration and Scale**
- Decentralized system with few corporate functions and controls;
- System board has limited system oversight and a majority of the decision making occurs at the local level;
- Decentralized management teams with little sharing of best practices;
- Limited depth and breadth for contract negotiations with no material bargaining power; and
- Significant challenges recruiting and retaining staff and physicians in several locations.

**Market-Specific Considerations**
- Limited market share in most markets due to heavy competition;
- Disjointed medical staff with a lower level of commitment to the organization;
- No or low effort to adapt to changes in health care dynamics;
- Inconsistent or weak quality rankings; and
- Payer mix that is heavily reliant on government payers or specific insurers with a record of inconsistent or weak reimbursement to the organization.

96. In making our assessment of market position we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a market position assessment that is stronger or weaker than that indicated by paragraphs 92 to 94.

d) Management And Governance (10% weighting)

96. The management and governance assessment measures the strength of a health care organization’s management team and its governance. We use the same management and governance assessment for health care systems and stand-alone hospitals. Key factors that we assess include:

- Strategic positioning, such as the clarity and specificity of strategic plans as well as the organization’s record in meeting these plans;
- Risk and financial management, such as the articulation of operational and financial risks and associated mitigation plans and the ability to effectively respond to unexpected events; and
- Organizational effectiveness, such as the predictability of cash flows and management’s depth and breadth.

97. Table 9 provides typical management characteristics of health care organizations at each of the six assessment levels. In general, we assess each factor in table 9 by looking at the variety of factors cited and use a preponderance of factors to determine the initial assessment. Where the range of assessments is combined, such as ‘extremely strong’ and ‘very strong’, we evaluate the overall preponderance of factors and our view of the organization’s relative strengths within the range using both historical and projected evidence.

98. Given the direct impact management practices have on an organization's credit profile, any one materially deficient sub-factor could be potentially harmful to credit quality. If we view any one factor as presenting sufficient risk to the health care organization's credit profile, we generally would cap the management and governance assessment at ‘vulnerable’ even if the remaining factors are assessed more favorably.
Table 9

### Management Assessment

<table>
<thead>
<tr>
<th></th>
<th>Extremely Strong or Very Strong</th>
<th>Strong or Adequate</th>
<th>Vulnerable or Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Positioning</td>
<td>Evidence of specific operational goals with clear measures of achievement. A record of market leadership and of achieving financial/operational goals. Successful relative to peers.</td>
<td>Plans lack depth or specific financial/operational goals. A record of achieving most financial/operational goals.</td>
<td>Limited evidence that plans exist, or plans are superficial. Strategy inconsistent with enterprise’s capabilities or market conditions. Abrupt or frequent changes in strategy, acquisitions, divestitures, or restructurings. Management often fails to achieve its financial/operational goals.</td>
</tr>
<tr>
<td>Risk Management and Financial Management</td>
<td>Management has successfully instituted policies that mitigate key risks, and has set rigorous and ambitious, but reasonable, standards for operational performance.</td>
<td>Management has set standards for operational performance that are achievable and similar to industry norms. Average risk management function and resources relative to peers.</td>
<td>Management lacks wherewithal, discipline, or commitment to achieve set standards, or has low standards. Limited risk-management efforts.</td>
</tr>
<tr>
<td>Organizational Effectiveness</td>
<td>Management has considerable expertise, experience, and a record of success in operating all of its major lines of business. It has good depth and breadth across its major lines of business.</td>
<td>Management has sufficient, but unexceptional, expertise and experience in operating its major lines of business. Its depth or breadth is limited in some areas.</td>
<td>Management lacks the expertise and experience to fully understand and control its business. The enterprise often deviates significantly from its plans. The loss of key personnel would seriously affect the enterprise’s operations.</td>
</tr>
</tbody>
</table>

99. Governance is assessed as ‘neutral’ or ‘negative.’ While good governance is essential, we believe that good governance does not by itself improve credit quality because good governance will be evidenced in the strength of management and other factors that we already assess in these criteria. On the other hand, demonstrably weak governance could have a significant negative impact on credit quality.

100. A neutral governance assessment does not affect the overall management and governance assessment. A negative governance assessment results in a capped management and governance assessment of no better than ‘vulnerable’.

101. The governance measures outlined in table 10 are assessed as neutral or negative with four or more neutral assessments generally resulting in a neutral governance assessment and two or more negative assessments generally resulting in a negative governance assessment. In addition, a negative governance assessment generally will be assigned, resulting in a capped management and governance assessment of no better than ‘vulnerable’, if one of these conditions exist:

- The board does not hold all key reserve powers and does not have the ability to remove management and approve all meaningful financial transactions. We consider board independence as paramount to effective governance.

- More than 20% of board members must be approved by an outside entity or an outside entity appoints more than 20% of board members, if we believe such requirements could result in the board not acting in the best interests of the organization. Examples of such outside entities include governments, universities, religious organizations, and businesses.
Table 10

**Governance Assessment**

<table>
<thead>
<tr>
<th></th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Board Effectiveness</strong></td>
<td>The board maintains sufficient independence from management to provide effective oversight.</td>
<td>The board manifests a lack of independence from management and provides insufficient oversight and scrutiny of key enterprise risks, compensation, and/or tolerates unmanaged conflicts of interest.</td>
</tr>
<tr>
<td><strong>Management Culture</strong></td>
<td>Management is responsive to all stakeholders' interests, appropriately balances those interests, and acknowledges that the board of directors is the ultimate decision-making authority.</td>
<td>Management proves incapable of managing conflicts of interest, or there is excessive management turnover. Alternatively, management dominates the board of directors.</td>
</tr>
<tr>
<td><strong>Regulatory, Tax, or Legal Infractions</strong></td>
<td>The enterprise generally remains free of regulatory, tax, or legal infractions and has stable relationships with regulatory authorities.</td>
<td>The enterprise has a history of regulatory, tax, or legal infractions beyond an isolated episode or outside industry norms.</td>
</tr>
<tr>
<td><strong>Internal Controls</strong></td>
<td>Internal controls are viewed as adequate.</td>
<td>Internal controls are viewed as deficient</td>
</tr>
<tr>
<td><strong>Financial Reporting and Transparency</strong></td>
<td>Accounting choices are usually reflective of the economics of the business. Financial reports are timely, accurate, and provide detail sufficient to support quality financial statement analysis.</td>
<td>Financial statement reporting is usually not timely, inaccurate, incomplete, or presented in a format that is not understandable, or is inadequate for quality financial statement analysis.</td>
</tr>
</tbody>
</table>

**e) Adjusting the initial enterprise profile assessment**

Table 11 outlines examples of situations where we would generally adjust the initial enterprise profile assessment to arrive at the final enterprise profile assessment. On an exceptional basis, there may be additional situations that are not in table 11 but could also result in an adjustment to the initial enterprise profile assessment. For organizations qualifying for multiple adjustments, our determination of the total adjustment will take into account our view of any overlap in the causes of the adjustments.

Table 11

**Examples Of Adjustments To The Initial Enterprise Profile Assessment**

<table>
<thead>
<tr>
<th>If</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of aggressive policies and strategies or operating in a rapidly changing competitive environment</td>
<td>Final enterprise profile assessment generally would be one assessment level weaker than the initial enterprise profile assessment</td>
</tr>
<tr>
<td>Change in reimbursement or competitive position that is not already factored into market share or financial metrics</td>
<td>Final enterprise profile assessment generally would be one assessment level weaker or stronger than the initial enterprise profile assessment depending on whether the reimbursement or competitive changes are positive or negative</td>
</tr>
<tr>
<td>Country risk assessment for U.S. or Canada is ‘4’, ‘5’, or ‘6’</td>
<td>Enterprise profile assessment generally would be capped at ‘adequate’, ‘vulnerable’, or ‘highly vulnerable’, respectively</td>
</tr>
</tbody>
</table>

In cases where the health care organization has what we consider to be aggressive expansion plans, fundamental change in the business model, or where the competitive landscape is rapidly changing, and we believe as a result of these changes that the organization's enterprise profile assessment will weaken materially over time, we would negatively adjust the enterprise profile assessment, generally by one assessment level in anticipation of the effect of these changes.
In cases where a change could be positive, such as the bankruptcy or closure of a nearby competitor or a change in reimbursement designation, the enterprise profile assessment could be positively adjusted, generally by one assessment level.

Country risk is the risk an entity faces by having some of its operations or assets exposed to one or more countries (see "Country Risk Assessment Methodology And Assumptions", published Nov. 19, 2013). Country-specific risks consist of:
- Economic risks;
- Institutional and governance effectiveness risks;
- Financial system risk; and
- Payment culture/rule of law risk.

The country risk assessment is determined on a scale from '1' (very low risk) to '6' (very high risk), which equates to the same scale of '1' (extremely strong) to '6' (highly vulnerable) used in these criteria.

The country risk assessment with respect to these criteria derives from the current U.S. or Canada country risk assessment as determined under the criteria cited above. If the U.S. or Canada country risk assessment is '3' or better, there is generally no positive or negative impact on the final rating. However, if the U.S. or Canada country risk assessment were to worsen to '4' or above, this could affect the enterprise risk profile assessment. Specifically, if the U.S. or Canada country risk assessment is '4', '5', or '6', we would generally assign an enterprise risk profile assessment of no better than 'adequate', 'vulnerable', or 'highly vulnerable', respectively.

3. Financial Profile

Health care systems benefit from increased economic, business, and geographic dispersion among members, which can lower volatility of earnings. As a result, we assess health care systems using financial metric thresholds that are generally less robust than the thresholds we use to assess stand-alone hospitals.

a) Financial performance (40% weighting)

Financial performance measures how the absolute level and volatility of recent and projected earnings and cash flow could affect a health care organization's debt servicing capability. These criteria focus on six measures to evaluate financial performance.

- Total operating revenue reflects the relative size and stability of the organization's business. A larger revenue base generally indicates that revenues are drawn from a differentiated pool of patients, physicians, and related businesses, thus indicating greater revenue diversity;
- EBIDA margin illustrates a health care organization's cash flow generation from total revenues, which provides an indication of the organization's ability to produce cash flow sufficient to cover debt service and fund strategic and capital objectives;
- Operating margin shows a health care organization's capability to generate profits from its businesses;
- Excess margin factors in both operating performance and other revenues and expenses that the health care organization incurs outside the scope of its core clinical and business operations, such as investment income and fundraising;
- Maximum annual debt service (MADS) coverage represents the number of times that an organization is able to cover its MADS from cash flow generated through operating and nonoperating activities; and

- Lease-adjusted MADS coverage takes into account a health care organization's ability to cover all financing payments regardless of the vehicle chosen.

110. We consider the coverage ratios, which generally comprise 50% of the assessment, to be the most important factors in our assessment of financial performance. Almost as important are the margin ratios, especially the operating margin, which is a direct measure of revenues and expenses that are most within management’s control. Total operating revenue is generally a tertiary factor, however it triggers our assessment of heightened risk factors associated with small hospitals.

111. Table 12 provides typical characteristics of stand-alone hospital financial metrics as they correspond to the financial performance measures noted above. In general, we assess each factor in table 12 and use a preponderance of factors approach to determine the assessment.

Table 12

Financial Performance Assessment For Stand-Alone Hospitals

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating revenues (Mil. $)</td>
<td>&gt;3,200</td>
<td>2,100 – 3,200</td>
<td>1,600 – 2,100</td>
<td>1,100 – 1,600</td>
<td>900 – 1,100</td>
<td>&lt;900</td>
</tr>
<tr>
<td>EBIDA margin (%)</td>
<td>&gt;13</td>
<td>11.5 – 13.0</td>
<td>10.0 – 11.5</td>
<td>8.5 – 10.0</td>
<td>7.0 – 8.5</td>
<td>&lt;7.0</td>
</tr>
<tr>
<td>Operating margin (%)</td>
<td>&gt;5.0</td>
<td>3.5 – 5.0</td>
<td>2.0 – 3.5</td>
<td>0.5 – 2.0</td>
<td>-1.0 – 0.5</td>
<td>&lt;-1.0</td>
</tr>
<tr>
<td>Excess margin (%)</td>
<td>&gt;7.0</td>
<td>5.5 – 7.0</td>
<td>4.0 – 5.5</td>
<td>2.0 – 4.0</td>
<td>-0.5 – 2.0</td>
<td>&lt;-0.5</td>
</tr>
<tr>
<td>MADS coverage (x)</td>
<td>&gt;6.0</td>
<td>4.0 – 6.0</td>
<td>3.0 – 4.0</td>
<td>2.0 – 3.0</td>
<td>1.0 – 2.0</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Lease-adjusted MADS coverage (x)</td>
<td>&gt;4.5</td>
<td>3.0 – 4.5</td>
<td>2.0 – 3.0</td>
<td>1.5 – 2.0</td>
<td>1.3 – 1.5</td>
<td>&lt;1.3</td>
</tr>
</tbody>
</table>

Total operating revenue thresholds may be adjusted for currency conversion or changing economic conditions.

112. Table 13 provides typical characteristics of health care system financial metrics as they correspond to the financial performance measures noted above. In general, we assess each factor in table 13 and use a preponderance of factors to determine the assessment.

Table 13

Financial Performance Assessment For Health Care Systems

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating revenues (Mil. $)</td>
<td>&gt;3,200</td>
<td>2,100 – 3,200</td>
<td>1,600 – 2,100</td>
<td>1,100 – 1,600</td>
<td>900 – 1,100</td>
<td>&lt;900</td>
</tr>
<tr>
<td>EBIDA margin (%)</td>
<td>&gt;13</td>
<td>11.5 – 13.0</td>
<td>10.0 – 11.5</td>
<td>8.5 – 10.0</td>
<td>7.0 – 8.5</td>
<td>&lt;7.0</td>
</tr>
<tr>
<td>Operating margin (%)</td>
<td>&gt;5.0</td>
<td>3.5 – 5.0</td>
<td>2.0 – 3.5</td>
<td>0.5 – 2.0</td>
<td>-1.0 – 0.5</td>
<td>&lt;-1.0</td>
</tr>
<tr>
<td>Excess margin (%)</td>
<td>&gt;7.0</td>
<td>5.5 – 7.0</td>
<td>4.0 – 5.5</td>
<td>2.0 – 4.0</td>
<td>-0.5 – 2.0</td>
<td>&lt;-0.5</td>
</tr>
<tr>
<td>MADS coverage (x)</td>
<td>&gt;6.0</td>
<td>4.0 – 6.0</td>
<td>3.0 – 4.0</td>
<td>2.0 – 3.0</td>
<td>1.0 – 2.0</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Lease-adjusted MADS coverage (x)</td>
<td>&gt;4.5</td>
<td>3.0 – 4.5</td>
<td>2.0 – 3.0</td>
<td>1.5 – 2.0</td>
<td>1.3 – 1.5</td>
<td>&lt;1.3</td>
</tr>
</tbody>
</table>

Total operating revenue thresholds may be adjusted for currency conversion or changing economic conditions.

113. In assessing financial performance, we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels...
generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a financial performance assessment that is stronger or weaker than that indicated by tables 12 and 13.

An example of a positive financial performance consideration includes:
- A stand-alone hospital with multiple business lines or more than one acute care hospital which does not qualify as a health care system per the definition in Appendix 3, but has more revenue and business diversity than a typical stand-alone hospital.

Examples of negative financial performance considerations include:
- Reliance on special funding sources such as disproportionate share, upper payment limit, statewide charity care pool, rural floor funds under Medicare wage payment policy, or provider fee mechanisms which reflect appropriation, budgetary, and sunset risks associated with most of these programs;
- A material increase or anticipated increase in required pension or other postemployment benefit (OPEB) costs. In making this assessment, we consider risk of acceleration of pension and OPEB payments and likelihood of budgetary stress due to the increase in such payments; and
- MADS coverage, as calculated by S&P Global Ratings, was or is expected to be below 1x.

b) Liquidity and financial flexibility (30% weighting)

Liquidity and financial flexibility measures how a health care organization's cash flow and internal sources of unrestricted reserves may affect its debt servicing capability. These criteria focus on five measures to evaluate liquidity and financial flexibility:
- Average age of plant measures the current state of the physical plant and can be an indicator of future capital needs;
- Capital expenditures/depreciation and amortization expense measures the adequacy of capital spending over time. It is important to maintain equipment, appropriate capacity for services, attractive campuses, and fund strategic capital because these can affect patient preference, physician recruiting, quality and safety;
- Days' cash on hand reflects an organization's financial flexibility and capability to withstand operating challenges while still covering its operating expenditures;
- Unrestricted reserves/long-term debt measures an organization's financial flexibility and is a way to assess debt capacity and debt servicing ability; and
- Unrestricted reserves/contingent liabilities assesses an organization's potential exposure to contingent liabilities and its capacity to tap internal reserves while also maintaining sufficient reserves for operating purposes.

We consider days' cash on hand and unrestricted reserves to long-term debt to be the most important ratios as they indicate the level of balance sheet flexibility an organization may have. These two measures generally comprise 60% of the assessment. In addition, if an organization has a low level of unrestricted reserves to contingent liabilities without commensurate resources, that can become equally as important to the assessment as days' cash on hand and unrestricted reserves to long-term debt.

Table 14 provides typical characteristics of stand-alone hospital financial metrics as they
correspond to the liquidity and financial flexibility measures noted above. In general, we assess each factor in table 14 and use a preponderance of factors to determine the assessment.

Table 14
Liquidity And Financial Flexibility Assessment For Stand-Alone Hospitals

<table>
<thead>
<tr>
<th>Factor</th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of plant (years)</td>
<td>&lt;8.5</td>
<td>8.5–10</td>
<td>10–11</td>
<td>11–12</td>
<td>12–14</td>
<td>&gt;14</td>
</tr>
<tr>
<td>Capital expenditures/depreciation and amortization expense (%)</td>
<td>&gt;175</td>
<td>140–175</td>
<td>120–140</td>
<td>100–120</td>
<td>80–100</td>
<td>&lt;80</td>
</tr>
<tr>
<td>Days' cash on hand</td>
<td>&gt;275</td>
<td>205–275</td>
<td>160–205</td>
<td>110–160</td>
<td>80–110</td>
<td>&lt;80</td>
</tr>
<tr>
<td>Unrestricted reserves/long-term debt (%)</td>
<td>&gt;225</td>
<td>175–225</td>
<td>120–175</td>
<td>85–120</td>
<td>60–86</td>
<td>&lt;60</td>
</tr>
<tr>
<td>Unrestricted reserves/contingent liabilities (%)</td>
<td>&gt;400</td>
<td>300–400</td>
<td>200–300</td>
<td>100–200</td>
<td>90–100</td>
<td>&lt;90</td>
</tr>
</tbody>
</table>

Table 15 provides typical characteristics of health care system financial metrics as they correspond to the liquidity and financial flexibility measures noted above. In general, we assess each factor in table 15 and use a preponderance of factors to determine the assessment.

Table 15
Liquidity And Financial Flexibility Assessment For Health Care Systems

<table>
<thead>
<tr>
<th>Factor</th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of plant (years)</td>
<td>&lt;9.0</td>
<td>9.0 – 10.5</td>
<td>10.5 – 11.5</td>
<td>11.5 – 12.5</td>
<td>12.5 – 14.5</td>
<td>&gt;14.5</td>
</tr>
<tr>
<td>Capital expenditures/depreciation and amortization expense (%)</td>
<td>&gt;160</td>
<td>130 – 160</td>
<td>110 – 130</td>
<td>90 – 110</td>
<td>70 – 90</td>
<td>&lt;70</td>
</tr>
<tr>
<td>Days' cash on hand</td>
<td>&gt;250</td>
<td>200 - 250</td>
<td>150 - 200</td>
<td>100 - 150</td>
<td>70 - 100</td>
<td>&lt;70</td>
</tr>
<tr>
<td>Unrestricted reserves/long-term debt (%)</td>
<td>&gt;200</td>
<td>150 - 200</td>
<td>110 - 150</td>
<td>80 – 110</td>
<td>55 – 80</td>
<td>&lt;55</td>
</tr>
<tr>
<td>Unrestricted reserves/contingent liabilities (%)</td>
<td>&gt;300</td>
<td>200 – 300</td>
<td>150 – 200</td>
<td>100 – 150</td>
<td>80 – 100</td>
<td>&lt;80</td>
</tr>
</tbody>
</table>

In making our assessment of liquidity and financial flexibility, we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a liquidity and financial flexibility assessment that is stronger or weaker than that indicated by tables 14 and 15.

Examples of positive considerations:
- A health care organization which expects or has already received a significant one-time philanthropic gift or whose pending capital campaign is expected to yield substantial unrestricted reserves. We typically would not apply this adjustment if the funds can be quantified and included in the financial ratio calculations on a pro forma basis, or if we believe philanthropic history and potential are already reflected in existing balance sheet and income statement metrics;
- There is a significant off-balance-sheet-dedicated foundation, with a history of measurable support for the organization’s operations or capital projects, or there is a significant alternate source of revenue such as state or provincial support for capital; or
- The organization owns health plan assets that we believe disproportionately and negatively
affect the unrestricted reserve related ratios by virtue of high expenses associated with non-risk-bearing insurance business (such as a "third-party administrator" business line), or otherwise has significantly less risk than the acute care business, and therefore less need for unrestricted reserves. We may also use this adjustment if a significant portion of the health plan’s reserves are restricted for regulatory reasons.

Example of a negative consideration:
- A health care organization has significant unfunded liabilities. These may include professional liability, pension liability, other postemployment benefits, or workers compensation.

c) Debt (30% weighting)

Debt measures the extent current, proposed, contingent, and off-balance-sheet liabilities may affect an organization’s debt servicing capability. These criteria focus on four measures to evaluate debt:

- Debt burden reflects the demand that an organization's debt service has on total revenues;
- Long-term debt/capitalization is a measure of leverage;
- Contingent liabilities/long-term debt reflects the riskiness of the total capital structure as it relates to potential liquidity events that could affect an organization's financial flexibility and capacity to service debt; and
- Funded status of defined-benefit pension plan reflects the strength of funding for defined-benefit pension plans. Our assessment includes a forward-looking view of funding requirements and management’s plans to address the risks. We believe a low pension funding ratio could signal elevated risks after incorporating the appropriateness of actuarial assumptions. Similarly, we consider whether pension contributions are not actuarially determined, based on weak actuarial methods, or when required contributions are not regularly funded.

We consider the most important ratios contributing to our assessment of debt to be debt burden and long-term debt/capitalization as they provide an indication of an organization’s relative debt levels. These two debt measures generally comprise 60% of the assessment. The funded status of the defined-benefit pension plan and contingent liabilities/long-term debt can become very important to our assessment if the metrics are particularly weak. While we consider an organization without a defined benefit pension plan or contingent obligation, or with a frozen defined benefit plan, to be in a stronger position relative to the debt assessment, strength in these two ratios alone generally would not offset risks associated with high debt levels.

Table 16 provides typical characteristics of stand-alone hospital financial metrics as they correspond to the debt measures noted above. In general, we assess each factor in table 16 and use a preponderance of factors to determine the assessment.
### Table 16

**Debt Assessment For Stand-Alone Hospitals**

<table>
<thead>
<tr>
<th></th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt burden (%)</td>
<td>&lt;2.2</td>
<td>2.2–2.9</td>
<td>2.9–3.7</td>
<td>3.7–4.8</td>
<td>4.8–5.8</td>
<td>&gt;5.8</td>
</tr>
<tr>
<td>Long-term debt/capitalization (%)</td>
<td>&lt;25</td>
<td>25–35</td>
<td>35–42</td>
<td>42–50</td>
<td>50–60</td>
<td>&gt;60</td>
</tr>
<tr>
<td>Contingent liabilities/long-term debt (%)</td>
<td>&lt;20</td>
<td>20–30</td>
<td>30–40</td>
<td>40–50</td>
<td>50–60</td>
<td>&gt;60</td>
</tr>
<tr>
<td>Funded status of defined-benefit pension plan (%)</td>
<td>&gt;100</td>
<td>85–100</td>
<td>75–85</td>
<td>65–75</td>
<td>55–65</td>
<td>≤55</td>
</tr>
</tbody>
</table>

126. Table 17 provides typical characteristics of health care system financial metrics as they correspond to the debt measures noted above. In general, we assess each factor in table 17 and use a preponderance of factors to determine the assessment.

### Table 17

**Debt Assessment For Health Care Systems**

<table>
<thead>
<tr>
<th></th>
<th>Extremely Strong</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Adequate</th>
<th>Vulnerable</th>
<th>Highly Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt burden (%)</td>
<td>&lt;2.5</td>
<td>2.5–3.0</td>
<td>3.0–4.0</td>
<td>4.0–5.0</td>
<td>5.0–6.0</td>
<td>&gt;6.0</td>
</tr>
<tr>
<td>Long-term debt/capitalization (%)</td>
<td>&lt;27</td>
<td>27–37</td>
<td>37–45</td>
<td>45–55</td>
<td>55–65</td>
<td>&gt;65</td>
</tr>
<tr>
<td>Contingent liabilities/long-term debt (%)</td>
<td>&lt;30</td>
<td>30–40</td>
<td>40–50</td>
<td>50–60</td>
<td>60–70</td>
<td>&gt;70</td>
</tr>
<tr>
<td>Funded status of defined-benefit pension plan (%)</td>
<td>&gt;95</td>
<td>80–95</td>
<td>70–80</td>
<td>60–70</td>
<td>50–60</td>
<td>&lt;50</td>
</tr>
</tbody>
</table>

127. In making our assessment of debt, we may also take additional considerations into account, based on the preponderance of available information and our view of the relevance of these factors to the overall assessment, with smaller adjustments of one or two assessment levels generally being the case versus greater adjustments of three or more assessment levels. These additional considerations could result in a debt assessment that is stronger or weaker than that indicated by tables 16 and 17.

### d) Adjusting The Initial Financial Profile Assessment

128. Table 18 outlines examples of situations where we would generally adjust the initial financial profile assessment to arrive at the final financial profile assessment. On an exceptional basis, there may be additional situations that are not in table 18 but which could also result in an adjustment to the initial financial profile assessment. For organizations qualifying for multiple adjustments, our determination of the total adjustment will take into account our view of any overlap in the causes of the adjustments.
Examples Of Adjustments To The Initial Financial Profile Assessment

<table>
<thead>
<tr>
<th>If</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business disruption such as failure to attain accreditation, permanent loss of a material payer contract, reimbursement designation, or revenue stream, excessive liability, or labor issues that threaten operations</td>
<td>Final financial profile assessment generally would be one assessment level weaker than the initial financial profile assessment</td>
</tr>
<tr>
<td>Contingent liabilities are greater than unrestricted reserves</td>
<td>Final financial profile assessment generally would be up to two assessment levels weaker than the initial financial profile assessment</td>
</tr>
<tr>
<td>Potentially sizable, but as yet unspecified, capital plans which could result in material additional debt or use of unrestricted reserves</td>
<td>Final financial profile assessment generally would be one assessment level weaker than the initial financial profile assessment</td>
</tr>
<tr>
<td>Negative financial policies assessment</td>
<td>Final financial profile assessment generally would be one assessment level weaker than the initial financial profile assessment</td>
</tr>
</tbody>
</table>

129. Examples of business disruption could include failure to attain accreditation or loss of accreditation—whether it was voluntarily sought or required as a condition of participation for Medicare or Medicaid. Exposure to a liability risk above insurance coverage levels or a judgment that is likely to result in a significant financial settlement could also create financial stress for an organization.

130. We expect that the business disruption adjustment described in table 18 will be rare for health care systems because accreditation and other business disruption factors cited here are generally hospital-specific and would therefore only affect a portion of a system’s operations. However, in cases where the disruption is severe or affects a large portion of the system, it generally would be applied.

131. Provisions in certain financial instruments create potential additional claims on the liquidity of health care organizations upon the occurrence of certain events or conditions specified in the instrument’s terms. For organizations with unrestricted reserves below the amount of contingent liabilities, such an event could materially weaken our assessment of the organization’s reserves and we would generally negatively adjust the initial financial profile assessment by as many as two levels. For more information, see the article "Contingent Liquidity Risks", published March 5, 2012.

132. For potentially sizable, but as yet unspecified, capital plans which could result in material additional debt or use of reserves and which we determine have a reasonable likelihood of occurrence but are not specific enough yet to determine pro forma or projected financial metrics, we would generally negatively adjust the initial financial profile assessment by one level. An example would be if a system planned to build a replacement hospital at one of its locations using an extremely large debt issuance, significant portion of unrestricted reserves, or a combination of both.

e) Financial Policies

133. The financial policies assessment, which can result in a neutral or negative influence on the overall financial profile assessment, consists of five sub-factors:

- Transparency and disclosure;
- Investment allocations and liquidity;
The financial policies assessment measures how financial management and policies have affected and are likely to affect an organization’s ability to service debt. When evaluating these five sub-factors, we rely on documentation provided by the organization and our periodic discussions with management. Relevant documents typically include audited financial statements, budget documents, financial forecasts, various policy documents related to treasury and risk management, and legal documents related to loans with third parties, typically banks. If a majority of the characteristics outlined in Table 19 are identified as negative, the financial policies assessment will generally be negative, and the overall financial profile assessment would typically be negatively adjusted by one assessment level. In addition, if any one characteristic outlined in Table 19 is identified as negative and, in our view, that single characteristic poses a significant credit risk, then we generally would negatively adjust the overall financial profile assessment by one level.

Table 19

Financial Policies Assessment

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Neutral Assessment</th>
<th>Negative Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency and Disclosure</td>
<td>A final unqualified audit is performed by an independent firm and is released within four months of the fiscal year-end. Comprehensive interim financial statements are compiled monthly on a GAAP basis. In jurisdictions where audited financial statements are not the norm for this sector, financial statements are certified or otherwise deemed to be of high quality.</td>
<td>The audit is qualified or may be typically late (not published within a reasonable time frame following fiscal year-end). Unaudited and interim financial statements are not comprehensive or representative of actual performance.</td>
</tr>
<tr>
<td>Investment Allocations and Liquidity</td>
<td>The investment management policy is appropriate relative to the health care organization’s liabilities, investment office sophistication, and potential capital needs. The health care organization does not need to use short-term lines of credit and has ample liquidity to meet working capital needs.</td>
<td>The investment management policy is more aggressive than appropriate or when compared to peers, in S&amp;P Global Ratings’ opinion. The health care organization needs to access lines of credit regularly.</td>
</tr>
<tr>
<td>Debt profile</td>
<td>Contingent liabilities are less than about 50% of total debt.</td>
<td>Contingent liabilities are more than about 50% of total debt.</td>
</tr>
<tr>
<td>Contingent Liability Principles</td>
<td>Liquidity is sufficient to meet any potential liabilities associated with contingent liabilities such as a failed remarketing or acceleration in the event of a covenant default. The health care organization has no swaps or the total notional amount of swaps outstanding, including basis swaps, is less than about 50% of long-term debt.</td>
<td>Liquidity is below the level of potential liabilities under contingent liability documents. The health care organization relies on swaps, with the total notional amount outstanding, including basis swaps, greater than about 50% of long-term debt.</td>
</tr>
<tr>
<td>Legal Structure</td>
<td>The legal package provided with the organization’s bond issues includes typically, at a minimum, a rate covenant, additional bonds test, and consultant call-in requirements for covenant violations.</td>
<td>The legal covenants may exclude, or have unusually favorable calculations, for one or more traditional covenant tests.</td>
</tr>
</tbody>
</table>

This paragraph has been deleted.
APPENDIX 1: ADDITIONAL INFORMATION

136. Types of ratings and other credit-related evaluations that can be assigned under these criteria:
   - We can assign stand-alone credit profiles (SACPs); group credit profiles (GCPs), issue credit ratings, and issuer credit ratings (ICRs). For more details on these types of credit evaluations, please see our rating definitions and the related criteria for SACPs and Group Rating Methodology. For those health care organizations that are part of a group, as defined by "Group Rating Methodology", these criteria would be used to determine the group credit profile and, if relevant, the SACP.

137. Other factors, aside from a health care organization’s credit characteristics, that can constrain the rating:
   - The final rating generally would be constrained by the sovereign rating on the U.S., in accordance with "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions", published Nov. 19, 2013.
   - Issue credit ratings will be determined based on our view of the ICR and the legal/covenant package, as more fully described in "Assigning Issue Credit Ratings Of Operating Entities", published May 20, 2015. Further guidance regarding our view of debt security and covenants is in table 19.
   - Subordinate debt obligations issued by health care organizations under the scope of these criteria will be rated consistent with our criteria, "Assigning Issue Credit Ratings Of Operating Entities". The issue credit rating could be affected by structural enhancements or other security features such as subordination or additional collateral.

138. Tax-secured hospital districts are within the scope of these criteria:
   - These criteria provide a framework for arriving at the issuer credit rating (ICR) of tax-secured hospital districts. The ICR reflects the general creditworthiness of the entity and does not incorporate the pledge or covenants provided to bondholders for any particular debt instrument. In the final step of our analysis, if we are rating a specific debt instrument, we review the legal structure of the instrument, including the pledge and covenants, to determine the issue credit rating. This analysis most often results in an issue credit rating that is the same as the ICR for a tax-secured hospital district’s debt; see "Assigning Issue Credit Ratings Of Operating Entities", published May 20, 2015.

139. Situations where these criteria may not apply to hospital district debt:
   - If we conclude that the hospital’s operating risks are sufficiently separated from the district (for example, in some cases, a district may convey full control and responsibility of the hospital facilities, operations, and financial support to an unrelated external party through a long-term lease). In such a case, the tax-secured debt of such hospital districts would be rated using the applicable tax-secured debt criteria.

140. Approach used to rate a hospital district that leases operations of the hospital to a third party while retaining 1) debt and 2) taxing and some revenue collection authority at the district level:
   - The rating approach will generally depend on our view of the terms of the operating agreement and the operator risk. Where termination events are present, we will generally combine the leased facilities’ financials with the district’s and if the operator is part of a group, we would base the combination on our view of the most relevant level of the operator’s organization to the
district's risk. This view may depend on the terms of the lease agreement, the organizational structure of the operator, and the operator's history with other similar arrangements.

APPENDIX 2: GLOSSARY

**Average age of plant:** Accumulated depreciation/depreciation expense.

**Capital adequacy:** The buffer between an insurer's available regulatory capital and the intervention level that would trigger regulatory action to address current or expected deficiencies in capital or liquidity.

**Capital expenditures/depreciation and amortization:** (Purchases of property, plant, and equipment/depreciation and amortization expense) x 100.

**Cash on hand (days):** Unrestricted reserves/[(operating expense minus depreciation and amortization expenses)/365].

**Contingent liabilities:** Variable-rate demand bonds, commercial paper, material bullet payments due within five years, material bonds with mandatory tender dates in five years or less, direct bank debt with acceleration clauses and covenants that differ from those in legal documents for the obligor's rated debt, debt guaranteed for parties outside the health care organization and its consolidated affiliates if the debt is not self-supporting, swap or other termination payments if the current rating is two notches or less from the termination trigger, and other identifiable contingencies.

**Contingent liabilities/long-term debt:** (Contingent liabilities/long-term debt) x 100.

**Debt burden:** (Maximum annual debt service/total revenue) x 100.

**EBIDA margin:** (Net income before interest, depreciation, and amortization expenses/total revenue) x 100.

**Equivalent admissions:** Inpatient admissions/(inpatient gross revenue/total gross revenue)

**Excess margin:** (Net income/total revenue) x 100.

**Funded status of defined-benefit pension plan:** (Fair value of pension plan assets/projected benefit obligation) x 100.

**Lease-adjusted MADS coverage:** (Net available for debt service + operating lease expense)/(maximum annual debt service + operating lease expense).

**Long-term debt/capitalization:** [Long-term debt/(unrestricted net assets + long-term debt)] x 100.

**MADS:** Maximum annual principal and interest payments on all obligated and nonobligated group debt including long-term bonds, capital leases, mortgages, and bank debt. S&P Global Ratings could make MADS adjustments to normalize debt service for variable-rate debt, draws on lines of credit, commercial paper, bullet maturities, debt guarantees, swaps, and unusual debt service structures.
MADS coverage: Net available for debt service/MADS.

Net available for debt service: Net income + depreciation and amortization expenses + interest expense.

Net income: Operating income + net nonoperating revenue.

Net nonoperating revenue: Nonoperating revenue minus nonoperating expense.

Nonoperating expense: Fundraising costs, income taxes, investment fees, and other nonoperating expenses.

Nonoperating revenue: Investment earnings, unrestricted contributions, discontinued operations, and other nonoperating revenue. Excluded from nonoperating revenue are unrealized gains or losses on investments, gains or losses from debt refinancing, unrealized gains or losses from annual swap valuation, asset impairment, and other one-time financial events. However, in certain circumstances, we may include items reported as nonrecurring into operations if we believe these costs have been or will be an ongoing part of a health care organization's annual financial performance.

Operating income: Total operating revenue - total operating expenses.

Operating margin: (Operating income/total operating revenue) x 100.

Primary service area (PSA): Generally defined as the region from which the hospital derives at least 75% of its inpatients.

Total operating revenues: Revenue from clinical operations, which typically include but is not limited to net patient service revenue, net assets released from restriction for operational purposes, premiums, grants, and medical education. We may also include the impact of joint ventures depending on their strategic relevance to the organization, materiality, and other financial effects on the organization. Total operating revenue excludes nonoperating revenue.

Total revenue: Total operating revenue + net nonoperating revenue.

Unrestricted reserves/contingent liabilities: (Unrestricted reserves/contingent liabilities) x 100.

Unrestricted reserves/long-term debt: (Unrestricted reserves/long-term debt) x 100.

Unrestricted reserves: Unrestricted cash + board designated funds + unrestricted investments. Unrestricted reserves exclude debt service funds, donor restricted amounts, funds designated for pension, temporarily or permanently restricted funds, and other funds that are legally restricted.

**APPENDIX 3: DEFINITION OF HEALTH CARE SYSTEMS**

To be rated under the sections of these criteria that apply to health care systems, the organization must generally meet one of the following two definitions:

- Three or more hospitals with total operating revenue in excess of $1.5 billion; or
- At least $750 million in total operating revenue and one of the following characteristics:
  
  a. Three or more hospitals in two or more states or provinces;
b. Three or more hospitals in a single state or province where the largest hospital’s operating revenue does not exceed approximately two-thirds of total operating revenues;

c. Four or more hospitals in a single state or province with a measurable source of diversity from non-acute care businesses, which we generally consider at least 15% of total operating revenue from services such as psychiatry, rehabilitation, health insurance plan, or long-term care; or

d. Ten or more hospitals.

All not-for-profit acute-care health care organizations that do not meet the health care system definition above will be rated under the sections of these criteria that apply to a stand-alone hospital.

General guidelines include:

- Multiple facilities on a single campus will be considered one hospital;

- Organizations that combine hospitals on distinct campuses under one Medicare provider number may be considered separate hospitals;

- Stand-alone hospitals include those devoted to acute-care niches such as women’s health, pediatrics, oncology, rehabilitation, orthopedics, and psychiatry and those that receive tax support;

- Hospitals that are considered specialty hospitals are generally not counted as a separate hospital for purposes of the health care system definition, but may be counted as "non-acute" care businesses for the diversity component of the definition in C above;

- We do not include revenue from employed physicians or physician group practices as sources of business diversity;

- We include revenue from a health care insurance business as a source of business diversity;

- For integrated delivery systems that include both hospital and insurance business lines, we generally assess the revenue mix of the organization, its history, the nature of its closest competitors, and strategic priorities of the parent organization to determine if the organization is in the scope of these criteria or not; and

- Total operating revenues thresholds may be adjusted for currency conversion or changing economic conditions.

REVISIONS AND UPDATES

This article was originally published on March 19, 2018. The criteria became effective upon publication.

Changes introduced after original publication:

- On May 15, 2019, we republished this criteria article to make nonmaterial changes. We updated references to related criteria and research, and we deleted text related to the original publication that was no longer relevant.

- On May 15, 2020, we republished this criteria article to make nonmaterial changes. We updated the contact information and references to related criteria and research. Additionally, we updated framework terminology in chart 1 and throughout the article to improve consistency across criteria.
RELATED CRITERIA AND RESEARCH

Superseded Criteria
- U.S. Not-For-Profit Acute-Care Stand-Alone Hospitals, Dec. 15, 2014
- Not-For-Profit Health Care, June 14, 2007
- Tax-Secured Hospital Debt, May 3, 2007

Related Criteria
- Group Rating Methodology, July 1, 2019
- Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Timeliness Of Payments: Grace Periods, Guarantees, And Use Of 'D' And 'SD' Ratings, Oct. 24, 2013
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Contingent Liquidity Risks, March 5, 2012
- Principles Of Credit Ratings, Feb. 16, 2011
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010

Related Research
- Insurance Industry And Country Risk Assessment Update: January 2020, Jan. 28, 2020
- S&P Global Ratings Definitions, Sept. 18, 2019
- Default, Transition, and Recovery: 2018 Annual U.S. Public Finance Default Study And Rating Transitions, May 31, 2019
- Standard & Poor's Assigns Industry Risk Assessments To 38 Nonfinancial Corporate Industries, Nov. 20, 2013

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as S&P Global Ratings' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.
## Contact List

### Analytical Contacts

<table>
<thead>
<tr>
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<th>Phone Number</th>
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</tr>
</tbody>
</table>

### Methodology Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
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