

This methodology note stands superseded. Refer to ICRA's website www.icra.in to view the updated methodology note on the sector.

Rating Methodology for Hospitals

This rating methodology explains ICRA's approach in assessing the creditworthiness of issuers in the Indian Hospital Services Industry. It aims to help issuers, investors and other interested market participants understand ICRA's approach in analysing risks that are likely to affect rating outcomes in this sector. While this methodology is not exhaustive, it attempts to provide a fair overview of the key parameters ICRA takes into consideration while rating hospitals.

Overview

The healthcare industry comprises of hospitals, diagnostic service providers, pharmacies, health insurers, wellness centres, medical equipment providers and medical researchers, among others. Hospitals are a vital and the largest component of the domestic healthcare industry, encompassing a sizeable portion of the healthcare service value chain. Hospitals provide diagnostic and curative services (medical, nursing and related services) utilising organized staff and inpatient facilities. In India, private sector plays a predominant role in the delivery-distribution network, housing majority of the operational beds and catering to a larger section of the population. The industry is highly fragmented, with more than 80% of the hospitals being standalone, owned and operated by medical professionals or Trusts.

Hospitals are primarily classified based on accessibility and on the breadth and depth of services rendered. Based on the range of services offered, hospitals can be identified as general and specialised hospitals¹, where general hospitals provide services across multiple specialities with a few entities also associated with medical colleges.

Based on complexity and depth of treatment provided, the key delivery formats are:

- [1] Primary care – the first local interface in the healthcare system catering to the widest section of population; private participation in this segment is relatively low
- [2] Secondary care – forms the first layer of specialised services rendered to patients
- [3] Tertiary healthcare – provides highly specialised medical treatment and consultation to patients referred from primary and secondary centres. The secondary and tertiary centres primarily differ based on the complexity and extent of specialisation offered

The Indian hospital industry has witnessed increasing demand over the past few decades driven by increasing penetration of medical services and health insurance, rising incidence of lifestyle diseases, growing disposable income, improving depth of services, growing urbanization and favourable demographics and surge in medical tourism.

Despite a healthy growth in both public and private sector investment in the healthcare industry and hospitals, in particular, India continues to suffer from low bed capacity in per capita terms. Concerns such as high real estate cost, increasing equipment and operating costs, and rising competition resulting in elongated pay back periods have limited the pace of bed addition.

¹ Hospitals focusing on a single speciality (such as dentistry, fertility, eye care, etc)

ICRA's Risk Analysis Framework for Hospitals

This rating methodology highlights the quantitative and qualitative risk factors that are likely to influence the rating outcomes for entities in the hospital industry, including, but not restricted to:

1. Business Risk Assessment

- Scale and diversification
- Competitive position
- Operating performance
- Project risk

2. Event risk

3. Financial Risk Assessment

- Revenue growth
- Profitability metrics
- Leverage, cash flows and coverage metrics
- Tenure mismatches and Risks relating to Interest rates and refinancing
- Accounting Quality, Contingent liabilities and Off-Balance sheet exposures
- Consolidated Financial Analysis
- Foreign Currency Risks

4. Regulatory risk

5. Strength of Promoters and Management Quality

6. Other Factors

Business Risk Assessment

Scale and Diversification: ICRA views scale as an important parameter while assessing hospitals, as scale economies are a key driver of operating earnings (efficiencies in purchasing and better absorption of fixed overheads) and financial flexibility. Revenue base and growth rate are two measurement criteria used to determine the scale of operations; a hospital with a large revenue base is more likely to have a diversified profile which lends stability to operations. Further, large hospitals tend to exhibit better earnings profile, providing necessary resources to expand and invest.

The diversity of revenue generated is analysed in tandem with the scale of operations, as diversity highlights the quality of revenue – sustainability and profitability. Sustainability and profitability are captured in terms of geographic diversity, and depth and breadth of services rendered. Geographic concentration risk is measured through assessment of number of facilities operated across markets and degree of cash flow concentration by number of facilities. ICRA also looks at diversity of services offered in terms of specialties offered, complexity of services and source of revenues (such as, outpatient, inpatient, pharmacies, and institutional tie-ups). A broader service offering helps a hospital to attract more patients and also recruit and retain specialist consultants.

A large and well diversified hospital carries a strong brand perception and is able to offer high end value-added services which augment profitability. ICRA also looks at the revenue mix in terms of payer profile i.e., share of revenues from institutional and insurance customers, while lending assured volumes, entail lower margin and longer cash conversion cycles.

Competitive Position: Market position is reflective of the issuer's scale, brand strength and track record, and aid the provider in capturing a higher patient share in the market. Strong market position also determines a hospital's growth prospects and its ability to attract and retain patients and consultants, which lends stability to earnings. Healthy market share for incumbents also acts as a barrier to new entrants in the region, particularly given the considerable outlay required towards infrastructure, technology and marketing in the business.

ICRA evaluates the hospital's occupancy and relative market position in a region based on comparison of inpatient revenues with leading players in the market; this apart, outpatient service revenues are evaluated as services rendered through outpatient setting such as daycare procedures are often material revenue

streams. ICRA also looks at the contribution of revenues and profits from the major hospital units for a large chain to evaluate revenue concentration. The extent of marketing spends, towards branding and creating requisite referral network, also plays an important role in improving growth rate of patient admissions.

With the increasing penetration of healthcare services across markets, price competitiveness is a key determinant of patient inflow. Nevertheless, the degree of price sensitivity of demand decreases as we move up the chain in terms of complexity of services rendered, where paying ability of the target population and demographics of the geographic area of operations also affect price sensitivity. A hospital with a large market share or with multi-discipline services enjoys better pricing power, particularly with institutional clients. While average revenue per occupied bed day (ARPOB) is the metric used by ICRA for understanding pricing flexibility, it is evaluated in conjunction with the specialty mix and depth of services rendered. Few of the above parameters are qualitatively incorporated into the assessment by ICRA, considering data constraints.

Operating performance: ICRA looks at various operational parameters which reflect a hospital's ability to optimize asset utilization and generate stable earnings over a period of time. These parameters also lend insight into the management's business strategy and efficiency of operations. Managing brand equity and maintaining high quality infrastructure to attract both medical consultants and patients, rendering effective patient services and minimizing bad debt concerns are critical success factors for efficient hospital operations.

For measuring asset utilization, ICRA assesses parameters such as occupancy levels, average length of stay (ALOS), growth in inpatient admissions and growth in outpatient volumes. Occupancy level, along with inpatient revenue per occupied bed day², is the most critical determinant of profitability, given the high operating leverage in the business. ALOS management also plays a role in asset utilization, where lengthening ALOS not backed by corresponding increase in complexity of service rendered indicates weak operating efficiency.

A modern and sound infrastructure is crucial for ensuring sustained levels of high service quality, besides aiding patient inflow and attracting qualified medical professionals. For gauging the quality of infrastructure, ICRA looks at the frequency, adequacy and quantum of capital spending and the vintage of the hospital facilities. The quality of the facility and services rendered are also judged from the clinical reputation enjoyed by the hospital and the various accreditations earned by the issuer.

Doctors and medical consultants play a major role in governing patient flow and bed utilization in hospitals. ICRA looks at key person risk as an important criterion, as a considerable number of players operate out of a single facility with limited diversification. Key parameters looked at by ICRA include the growth in staff and staffing policies, attrition levels (particularly among key consultants), qualification and experience, remuneration structure³, frequency and quantum of pay hikes, talent development and succession planning policies. In assessing talent development and staffing policies, ICRA also favorably considers entities that have access to a captive source of talent pool through operation of educational institutions which also augments research capabilities.

Project Risk: Given the growing demand for healthcare services, hospitals (both family run and corporate) are currently on an expansion drive in a bid to diversify and garner a larger share of under penetrated markets. This is in addition to the considerable amount of bed capacity additions being undertaken at existing facilities. This section briefly discusses the risks associated with such projects.

While analyzing a hospital under construction, apart from the parentage and support from group entities (required to fund losses during the initial gestation period), ICRA analyses project specific factors such as location, region specific demand-supply dynamics, costs and sources of funding, and execution risks.

Location and market determine the project's ability to attract patient share (i.e. occupancies and inpatient revenue per bed) which dictates the potential to generate cash flows. ICRA assesses the investment required per-bed as against other projects and existing hospitals and compares the same with expected earnings from

² Which measures the hospital's pricing flexibility and reflects the depth of services rendered.

³ Key consultants typically tend to have higher revenue / ownership shares as remuneration

the unit, to assess its debt repayment capacity. As discussed earlier, on account of long gestation periods, the mode of financing of the project also determines the credit risks associated with the project (including tenure and interest rate related risks). Finally, the past experience and ability of the management to ensure timely execution of project within budgeted cost levels also plays a key role in determining the viability and returns from the project.

Event Risk

ICRA also recognizes the possibility of events, such as, a substantial debt-funded capital expenditure; unrelated diversification, mergers and acquisitions; business restructuring, asset sales and spin-offs; capital restructuring; malpractice / reputation related risk; and regulatory interventions and litigations; which could have a material impact on the credit profile of an issuer and the same is factored in as a key rating sensitivity. In addition to the factors mentioned above, ICRA also looks at other indicators, which are common to all industries including, ownership, management, governance and liquidity.

Financial Risk Assessment

Revenue growth: ICRA looks at sustainability of revenue growth as one of the critical parameters on account of the high capital intensity and high degree of operating leverage inherent to the business. Ability to consistently record growth in revenues remains paramount to cover increasing inflationary pressures on fixed operating costs and capital investments (equipment and real estate). Stability in revenue growth rate also indicates the hospital's ability to leverage its market standing, diversity of product offerings and ability to generate surplus earnings for capital investments which are critical success factors.

ICRA considers the low cyclical nature associated with the hospitals business favourably as demand for healthcare services is largely insulated from macroeconomic cycles. However, ICRA notes that a relatively lower insurance payer mix (as compared to developed countries) and high competition could lead to fluctuations in occupancies and realisations. A hospital with revenue streams diversified across geographies and product lines or specialties is likely to be shielded from these risks to an extent. A larger revenue base is viewed as a positive factor, as smaller hospitals tend to exhibit higher revenue volatility given dependence on few specialties or consultants, indicating high concentration risk.

Quality of revenues is particularly critical for cash generation, determined also by the ability of the hospital to manage its receivables, given the increasing share of business from public sector entities and insurers in the payer mix. Further, in the case of hospital chains, ICRA also evaluates the contribution mix of new versus existing hospitals to the overall revenues and revenue growth.

Profitability metrics: ICRA uses EBITDA as the primary metric to measure profits for the hospital industry, as the same is capital structure agnostic and is reflective of extent of value addition. Hospitals in general tend to operate on relatively higher EBITDA margins (operating profit margins) in the healthcare value chain, reflecting the criticality and value addition in the services rendered. Higher margins are also indicative of the risk associated with the high capital intensity in the business. In addition to scale economies, operating profitability of hospitals also depends on diversity in product offering (depth and breadth of services) and level of integration, with a few hospital chains having presence across the value chain. EBITDA margins are also reflective of operating efficiencies driven by ability to improve occupancies, ALOS, pricing flexibility, cost per bed and other relevant parameters, as discussed earlier.

Performance of a hospital is viewed in tandem with its vintage, with seasoned hospitals likely to generate better profit margins. While the recent expansions undertaken by corporate hospitals result in lower margins on account of high gestation period, ICRA looks at unit wise profitability, specifically for facilities which contribute to a sizeable portion of overall earnings. Also, ICRA evaluates stability in operating margins over a period of time, as it measures the ability of the company to withstand competitive pressures apart from event specific risks. ICRA also measures return on capital employed (RoCE) to assess the core profitability of the business, with diversified and mature hospitals exhibiting relatively stable levels of returns.

Leverage, Cash Flows and Coverage indicators: Hospitals have significant re-investment requirements for expansion and upgradation of facilities. ICRA places considerable emphasis on measuring the adequacy

of cash flows (after meeting operating and investment needs) to meet debt repayment obligations. Assessment of the financial policy- past as well as future- is a key rating factor to ascertain the risk appetite of the management and its impact on the financial performance of the company.

The debt profile of hospitals typically is skewed towards long term debt on account of capital intensity, with the cash and carry nature of business limiting working capital requirements. ICRA analyses the overall indebtedness (including its features such as interest rate, tenure, and structure) in the context of the operations of the company i.e. size, profitability and capital base.

Leverage ratios are an indicator of the financial flexibility of a hospital to raise funds from alternative avenues, particularly when accruals are under pressure. Such flexibility is reflected in an entity's Total Debt-to-Tangible Net worth, Total Debt-to-EBITDA and Free Cash Flows-to-Debt ratios. A low leverage ratio indicates adequate cushion available in terms of raising funds primarily from external sources (debt borrowings) for meeting funding requirements and is a credit positive. Overall, a low Total Debt-to-EBITDA and a high Free Cash Flows-to-Debt ratio is a credit positive as it reflects the ability of the entity to service its debt obligations, fund growth opportunities and improve its competitive position without being over-dependent on external sources.

The interest coverage indicator reflects the ability of the issuer to fund the cost of external borrowings after meeting all operating expenditure. The ratio indicates a company's ability to absorb any decline in operational earnings emanating from various business risks, without impairing its ability to meet interest payments.

ICRA ascertains the adequacy of future cash flows to meet repayment obligations and investment requirements (measured by few ratios like Debt Service Coverage Ratio, Net Cash Accruals to Total Debt and Retained Cash Flows to Total Debt) besides considering sensitivity of cash flows to various scenarios. ICRA projects the financial performance of hospitals taking into account the expected operating performance based on various business related factors and also the estimated capex and investment requirements, as well as upcoming debt obligations to study the impact on revenue growth and profitability, cash flows, leverage as well as debt protection indicators. ICRA also looks at the funding requirements of an issuer and the funding options available to it.

Tenure Mismatches and Risks Relating to Interest Rates and Refinancing: Hospital industry remains highly dependent on the banking system to meet its funding requirements, with limited access to capital markets except for a few large corporate entities. Given the stringent lending norms, access to bank funding at times remains constrained especially for smaller hospitals resulting in liquidity issues. Also, dependence on short term borrowings to meet increasing investments in infrastructure exposes hospitals to funding mismatches and refinancing risks, especially during periods of tight liquidity. The ratings factor in the existence of adequate buffers of liquid assets and bank lines to meet any short-term obligations and the extent to which the issuer could be impacted by interest rate movements on borrowed funds. ICRA assesses the management's approach and track record of maintaining sufficient liquidity and also flexibility to access longer tenure funding to absorb any reasonable stress on cash flows.

Debt Servicing Track Record: The debt servicing track record of the issuer forms an important rating consideration. Any history of past delays or defaults in meeting interest and principal repayment obligations reduces the comfort level with respect to the issuer's future debt servicing capability. ICRA also factors in the ability and willingness of the issuer to honour its debt obligations during periods of financial stress.

Accounting Quality, Contingent Liabilities and Off-balance Sheet Exposures: ICRA also looks at the quality of accounting practices followed by a company based on interactions with the Statutory Auditors as well as studying the Auditors' Report and other Notes to Accounts disclosed by a company in its Annual Report. Some of the key factors looked at include – auditor qualifications with respect to internal control systems, debt servicing and asset liability mismatch; contingent liabilities and other off balance sheet items; and the method of revenue recognition and depreciation policy of a company in comparison with industry peers.

Foreign Currency Risks: The foreign currency risks for the industry primarily arise on account of import of equipment and technology (imports may be undertaken against letter of credit), operations outside India, income from overseas patients and foreign currency denominated debt. While assessing the exposure of an issuer to foreign currency risks, ICRA focuses on the impact of adverse movement in foreign exchange rates on the cost structures, profits and net cash outflows, besides evaluating the hedging mechanisms put in place. This apart, currency movements also have a marginal impact on the demand through medical tourism which is gaining increasing prominence.

Consolidated Financial Analysis: While majority of the hospitals in India operate out of a single facility, there has been increasing expansion undertaken by larger units to diversify their revenue streams. The industry has a few large players with presence across both domestic and international geographies through subsidiaries and associate entities. While evaluating the financial risk profiles of such issuers, ICRA assesses the consolidated financial indicators in terms of capital structure, debt coverage indicators and future funding requirements, given the common management and strong operational and financial linkages between these entities.

Regulatory Risks

Operations of hospitals are governed by several state and central government laws such as The Clinical Establishments (registration and regulation) Act 2010, Indian Medical Council Act 1956, Indian Medical Council Regulations 2002 and Pharmacy Act 1948, besides several other laws pertaining to construction, registration and operation of companies. The National Accreditation Board for Hospitals & Healthcare Providers (NABH), under the purview of the Ministry of Commerce, Government of India, also provides guidelines for running hospitals (as protocols and internal process / quality control mechanisms are critical in the healthcare business); accreditation from NABH aids a hospital in empanelment with government institutions and corporates.

Given the criticality of healthcare to the economy, the industry is also subject to interventions by state and central governments and other relevant regulatory authorities (such as incentives and financing environment); ICRA assesses the impact of the same on an issuer's credit profile.

Strength of Promoters and Management Quality

All ratings necessarily incorporate an assessment of the quality of the issuer's management, as well as the strength and weaknesses arising from an issuer being part of a conglomerate or a large group. In case the issuer is among the stronger entities within the group, its past track record and future plans in supporting other group companies are analyzed.

Given that majority of the hospitals in India are family run with most of them operating out of a single or few facilities, financial policies are often not well defined. As a result, it becomes challenging to assess a company's policies and risk taking capabilities and its impact on creditworthiness. The policies may also witness changes as ownership moves through generations. The managements in some cases may be more conservative and exercise significant control on the financial policies of the issuer. However, in the case of larger hospitals and corporate chains, the management is usually more professional with independent board representation and a qualified top management having experience in the healthcare industry. Thus, the comfort level of the management with leverage as evident from discussions and past actions becomes a key rating consideration in such cases.

ICRA gives adequate weightage to various qualitative aspects resulting from management meetings. A detailed discussion is held with the management to understand their business strategies, growth plans as well as risk appetite which may have an impact on the future performance of the issuer. Periodic interactions with the management also help ICRA estimate the possibility of the management's tendency to deviate from its business philosophy in times of stress. Ability of the management to meet their committed performance and ensure stability in operations are key to the rating.

Other Factors

Apart from the quality and experience of management, assessment of corporate governance, quality of financial reporting and information disclosures are also given considerable weightage while assigning ratings. Among the key areas of focus are the scope, frequency and effectiveness of internal audit undertaken across units, measures undertaken for managing attrition among medical consultants; and exchange risk, any major related party transactions, interactions with auditors, and ownership structure. The assessment of these factors can be subjective and variable over time.

Summing Up

The rating methodology broadly highlights ICRA's approach in assessing the business and financial risk profiles of issuers in the hospital sector. It should not be treated as an exhaustive discussion of all the factors considered while assigning a credit rating but a broad framework to help stakeholders understand the approach to the same.

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