
Section IV:

Prioritizing Financial Assistance to Financially Distressed Hospitals

A principal task of the Commission was to develop a framework for determining which New Jersey hospitals should receive state support in the face of financial distress. The following section puts forth the framework adopted by the Commission that defines hospitals as essential or non-essential and financially viable or not viable. The obvious implication of this work is the development of public policy to support essential hospitals that experience financial distress while allowing other hospitals to be subjected to market forces and potentially close.

The following section explores a range of issues related to the essentiality of hospitals and support that should be provided in such cases. The specific focus of individual chapters follows:

- Identifying New Jersey's Essential Hospitals (Chapter 12)
- Supporting Essential, Financially Distressed Hospitals (Chapter 13)
- Facilitating the Closure of Non-Essential, Financially Distressed Hospitals (Chapter 14)
- Improving State Oversight to Provide Greater Accountability for State Resources (Chapter 15)



Chapter 12: Identifying New Jersey's Essential Hospitals

Key Points

- **This chapter outlines a framework for identifying hospitals that warrant state support by assessing “essentiality” and “financial viability.”**
- **Hospitals would be deemed essential based on their level of care for financially vulnerable populations, their provision of certain essential services, and providing a high fraction of health services in the hospital's market area.**
- **Financial viability is determined by three measures: profitability (operating margin), liquidity (days cash-on-hand), and capital structure (long-term debt to capitalization).**
- **Hospitals that are more essential and less financially viable should be the focus of the State's effort to provide financial support. Market forces should be allowed to govern in other cases.**
- **Qualitative factors are important considerations in the final policy determination of whether a given hospital should receive support.**
- **The determination of hospitals' relative essentiality and financial viability score is a dynamic process meaning that the relative scores of hospitals on each measure will change from year to year. Closure of an area hospital is but one factor that will induce such changes.**

This chapter describes the Commission's approach to identifying hospitals that provide essential services in their market area, but are in financial distress and may warrant financial assistance from the State.

I. Development of Framework for Evaluating Hospitals

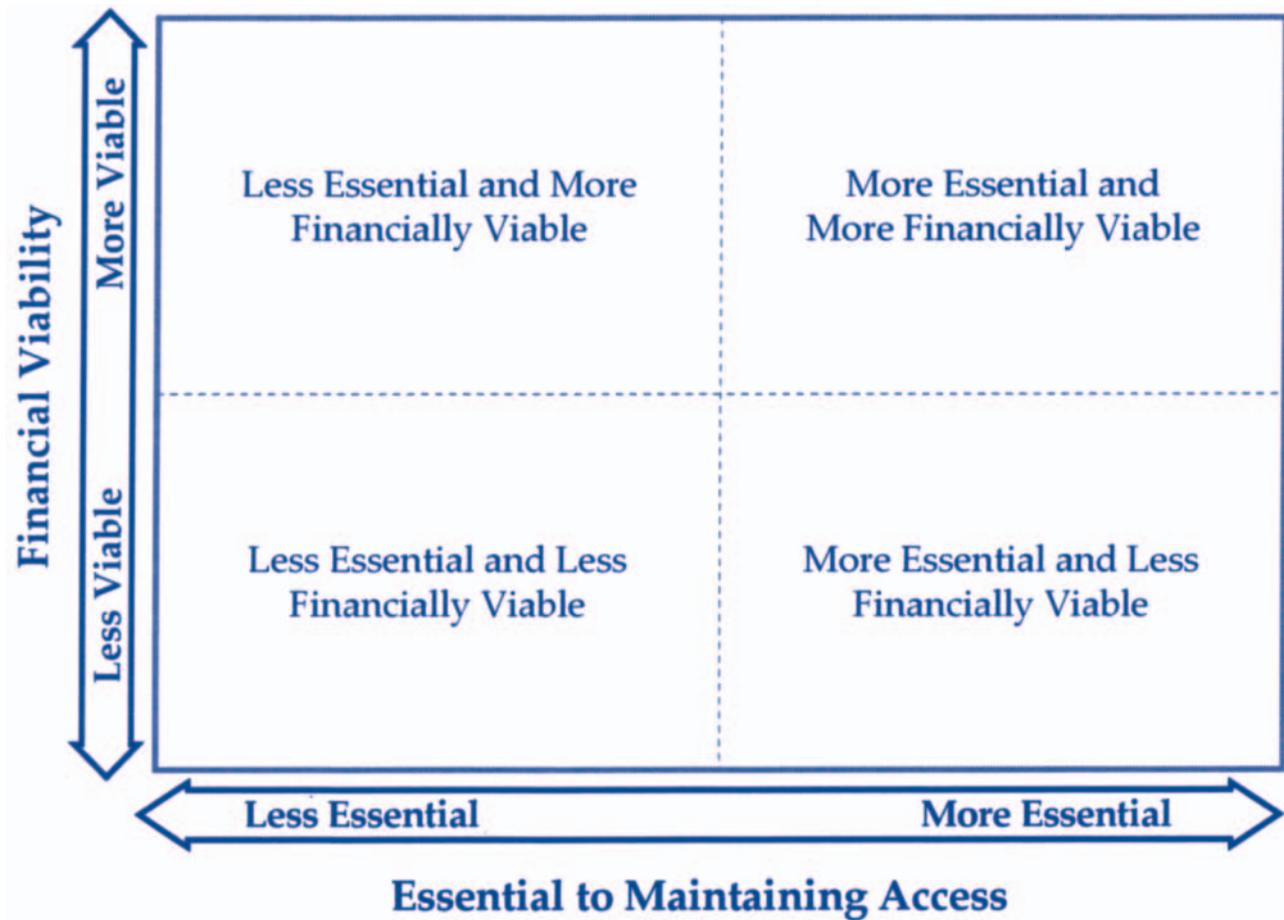
The purpose of developing criteria to identify essential hospitals and a method for scoring or ranking hospitals using the criteria is to provide a framework for determining which financially distressed hospitals are essential to meeting community needs for access to hospital care (and hence should be potentially eligible for state assistance), and which are not.

The Commission adopted an approach to categorizing acute care hospitals in New Jersey with respect to their potential eligibility for state support that involved assessing the relative “essentiality” and “financial viability” of each hospital in the State.

Figure 12.1 illustrates the analytical framework used in this approach. In using this framework, selected metrics associated with a hospital's “essentiality” are combined to develop an overall weighted “essentiality” index or plot point. Similarly, several metrics associated with a hospital's “financial viability” are combined to create an overall weighted “financial viability” index or plot point. Each hospital is then mapped on the grid, using the indexes or plot points as the horizontal and vertical coordinates, with the horizontal axis representing “essentiality” and the vertical axis tracking “financial viability.” Based on the results of the analysis, each hospital was placed in one of the four quadrants on the framework shown in Figure 12.1.

Each quadrant in Figure 12.1 represents a different category of hospital and carries with it potentially differing policy implications for the State. Given the Commission's charge of ensuring that the State's supply of hospital and other health care services is best configured to appropriately respond to community needs, one policy

Figure 12.1:
Framework for Evaluating Hospitals



implication is that the State should focus its efforts and resources on those hospitals deemed essential (e.g., to the right of the mid-point on the horizontal axis). Another policy implication is that hospitals that are more financially viable (e.g., above the mid-point on the vertical axis) are less likely to need state support than those hospitals that are less financially viable. As a result, one could conclude that the major policy implication for the State is that it would be appropriate for the State to focus its efforts and resources on those supporting hospitals that are essential and financially distressed (e.g., in the lower right hand quadrant) while allowing market forces to prevail in the other quadrants.

In addition to classifying hospitals into one of the four categories, the approach provides an indication of their comparative degree of “essentiality” and “financial viability.” This feature is likely to be particularly helpful to the State if there are not sufficient funds to assist all hospitals judged to be “essential” and financially less viable.

The metrics on “essentiality” and “financial viability” used in this analytic framework are discussed later on in this chapter. An important factor to note is that the analytical framework developed to assist the State uses historical data and as such, represents the relative essentiality and financial viability of providers at a particular point in time. The framework has, however, been designed to be “dynamic” in that it can be repeated over time with updated data as it becomes available. In addition, it is highly likely that a hospital’s essentiality will change if one or more hospitals in a hospital market area cease to operate. Similarly, a hospital’s financial viability will change over time as it undertakes performance improvement initiatives or experiences continued erosion of its financial position. In addition, should a hospital merge with or be acquired by another hospital or join a hospital system, its financial viability could change. For these reasons, publishing a list of where individual hospitals lie on the grid would be of little value given that the list is certain

to change every year. It is important that the State update the analyses and recalibrate the essentiality and financial viability scores on a regular basis as it weighs options to support financially distressed hospitals. Software has been provided to the Governor's Office to facilitate up-to-date analysis.

II. Criteria for Identifying Essential Hospitals in New Jersey

As a starting point for identifying essential hospitals, the Commission reviewed a wide variety of sources, including the criteria used by New York's *Commission on Health Care Facilities in the 21st Century*. After extensive discussions and deliberation, the Commission

agreed on three major categories of criteria to identify essential hospitals:

1. Care for financially vulnerable populations,
2. Provision of essential services, and
3. Utilization.

With the exception of provision of essential services, each category includes several quantifiable criteria and metrics for identifying essential hospitals. These criteria, the relevant metric, and data sources are shown in Table 12.1.

One of the key operating premises of the Commission was that hospitals that devote significant resources to caring for financially vulnerable populations represent essential providers in the New Jersey hospital system.

Table 12.1:
Quantifiable Criteria and Metrics for Identifying Essential Hospitals

Criterion / Metric	Data Source
Care for Financially Vulnerable Populations	
Medicaid and Uninsured Discharges	2006 UB-92 Patient Discharge Data from New Jersey Department of Health and Senior Services
Medicaid and Uninsured ED Visits	2006 UB-92 Emergency Department Data from New Jersey Department of Health and Senior Services
For Medicare Disproportionate Share Hospitals, their ratio of patient days for Medicare dual eligible patients to total Medicare patient days¹³³	2006 Medicare Cost Reports, as available and 2005 Medicare Cost Reports otherwise
Provision of Essential Services	
Trauma Center Designation	New Jersey Department of Health and Senior Services
Utilization	
Percent of the Dartmouth Atlas-defined Hospital Service Area's Total ED Visits	Analysis of 2006 UB-92 Emergency Department Data from New Jersey Department of Health and Senior Services
Inpatient Occupancy	Analysis of Acute Care Maintained Beds and Patient Days from 2006 B2 Reports submitted by hospitals to the New Jersey Department of Health and Senior Services
Total Patient Days and ED Visits	2006 B2 Reports for Patient Days and 2006 UB-92 Emergency Department Data from New Jersey Department of Health and Senior Services for ED Visits

¹³³To qualify as a Medicare Disproportionate Share Hospital (DSH) and receive the Medicare DSH payment adjustment, a hospital's DSH patient percentage – the sum of the percentage of Medicare inpatient

days attributable to patients eligible for both Medicare and Medicaid and the percentage of total inpatient days attributable to Medicaid patients not also eligible for Medicare – must be at least 15 percent.

To measure a hospital's *care for financially vulnerable populations*, three separate metrics were used:

- Medicaid and uninsured discharges (which provide a measure of a hospital's role in caring for indigent patients on an inpatient basis).
- Medicaid and uninsured emergency department visits (which measure the role a hospital plays as a source of primary care for patients who do not have an ongoing relationship with a primary care physician).
- A Medicare disproportionate share hospital's ratio of inpatients days attributable to Medicare patients who are also eligible for Medicaid to total Medicare days (which measures a hospital's role in caring for poor Medicare patients).

The second criterion, *provision of essential services* as measured by trauma center designation, was selected because trauma centers are regional resources that provide a comprehensive array of specialized services that are not available at every hospital.

Utilization was selected as a criterion for identifying hospitals that are essential to maintaining access to care because it reflects the size of the hospital's patient care activity. The operating premise here was that a more heavily-utilized facility was more essential than a less heavily-utilized facility. Three metrics were identified to assess utilization:

- A hospital's emergency department visits as a percent of the Dartmouth Atlas-defined hospital service area's total emergency department visits (which measures a hospital's relative importance as a provider of emergency services in a geographic area).
- Inpatient occupancy rate on the number of maintained beds reported by hospitals (this measures a hospital's volume of inpatient care relative to its capacity).
- The sum of total patient days and emergency department visits (which is an overall indicator of the size of a hospital's patient care activity). While total outpatient visits may be the best

indicator of the size of a hospital's ambulatory care activity, in the absence of a standardized source of data that allows for meaningful comparison across hospitals, we are using emergency department visits as a proxy.

III. Criteria for Identifying Hospital Financial Viability

The criteria for evaluating hospitals' financial viability are a subset of the financial indicators reviewed in the overall assessment of the financial condition of the State's hospitals in Chapter 5 of this report. After analyzing a variety of financial indicators, the Commission selected, in consultation with staff of the New Jersey Health Care Facilities Financing Authority, three key measures of hospital financial viability¹³⁴— (1) profitability, (2) liquidity and (3) capital structure – and the metrics for each.

Operating margin (as a percent of net revenue) was selected as the measure of profitability because it is a clear indicator of the hospital's financial performance in its core business of patient care and does not reflect the way the hospital is financed or the hospital's non-patient care revenue, such as income from investments.

Days cash-on-hand was chosen as the measure of liquidity because it reflects the level of funds immediately available to maintain current operations.

Long-term debt to capitalization was selected as the capital structure metric because it provides a clear assessment of how highly leveraged a hospital is.

Table 12.2 presents the criteria and metrics for assessing hospital financial viability along with the 2006 statewide average for each metric.¹³⁵

¹³⁴The Commission considered using times interest earned ratios, but decided not to because these ratios do not add anything to the distinctions the Commission seeks to make among hospitals over and above the Long-term Debt to Capitalization ratio.

¹³⁵The 2006 statewide median values for these three metrics are as follows: 0.56% for operating margin; 114 days cash-on-hand; and 45.1% for long-term debt to capitalization.

Table 12.2:
Criteria and Metrics for Identifying Hospital Financial Viability

Criterion	Metric	2006 Statewide Average for Metric
Profitability	Operating Margin	- 0.9%
Liquidity	Days Cash-on-Hand	124
Capital Structure	Long-term Debt to Capitalization ¹³⁶	51.2%

Hospitals' FY 2006 audited and unaudited financial statements provided by the New Jersey Health Care Facilities Financing Authority were used to calculate each of the three financial viability metrics for each hospital in the State. For hospitals that are members of hospital systems in which the system has financial responsibility for the individual hospitals, the hospital systems' value for each metric, calculated from the hospital systems' FY 2006 audited financial statements were used. The rationale for using hospital system financials is that when a system of hospitals jointly borrows under a master indenture as an obligated group, all the hospitals in the obligated group are financially bound together. In these cases it is the system's, rather than individual hospital members' financial indicators, that are the relevant measures for lenders and credit rating agencies and that the resources of the system are available to support individual hospitals in the system.

Each hospital was scored on these three financial viability metrics in the same way as the essential hospital metrics¹³⁷, except that all hospitals in the State were compared against the statewide average for the metric rather than against the average for the hospital market area in which the hospital is located. The reason for using the statewide average is to identify hospitals throughout the State that are in financial jeopardy, not necessarily to identify those facilities in each hospital

¹³⁶Several hospitals' Long-term Debt to Capitalization values were greater than 100 percent or were negative. We set these hospitals' Long-term Debt to Capitalization values at 100 percent for the financial viability analysis.

¹³⁷Since higher values of Long-term Debt to Capitalization put a hospital at greater risk, we inverted the score for that metric so that values above the average yield negative scores. Doing this allowed us to sum the scores to arrive at an overall score of each hospital's financial viability relative to other hospitals in the State.

market area that have better or poorer financial performance relative to the others in the same market area. For example, if all hospitals in a hospital market area are performing better financially than the statewide average, it is unlikely that any of them should be eligible for State support or assistance, even those hospitals whose financial performance compares unfavorably to others in that hospital market area.

An analysis of hospitals' financial viability indicates that for 2006, 38 of the State's 80 acute care hospitals in operation in 2006 have financial viability scores below the statewide average. Nearly 60 percent of these financially troubled hospitals are located in two hospital market areas (Newark/Jersey City and Hackensack, Ridgewood and Paterson).

The next section of this chapter provides an explanation of how hospitals were categorized using the criteria and metrics for essentiality and financial viability.

IV. Method for Comparing Hospitals: Standardized Metrics

As previously noted in Tables 12.1 and 12.2, the various metrics for each hospital used in this analysis have different dimensions: some are percentages and some are numbers. Furthermore, each of these metrics has a different degree of dispersion of hospital values around the average. Both circumstances make it impossible to collapse such metrics meaningfully into an overall score of "essentiality" and "financial viability."

A widely applied solution to this problem is to "standardize" all of the metrics which, in effect, converts them to variables that have the same dimension

and the same degree of dispersion. For each metric, each hospital’s score is based on how far above or below the average it is for that metric. The methodology for standardizing variables is described more fully in Appendix 6.

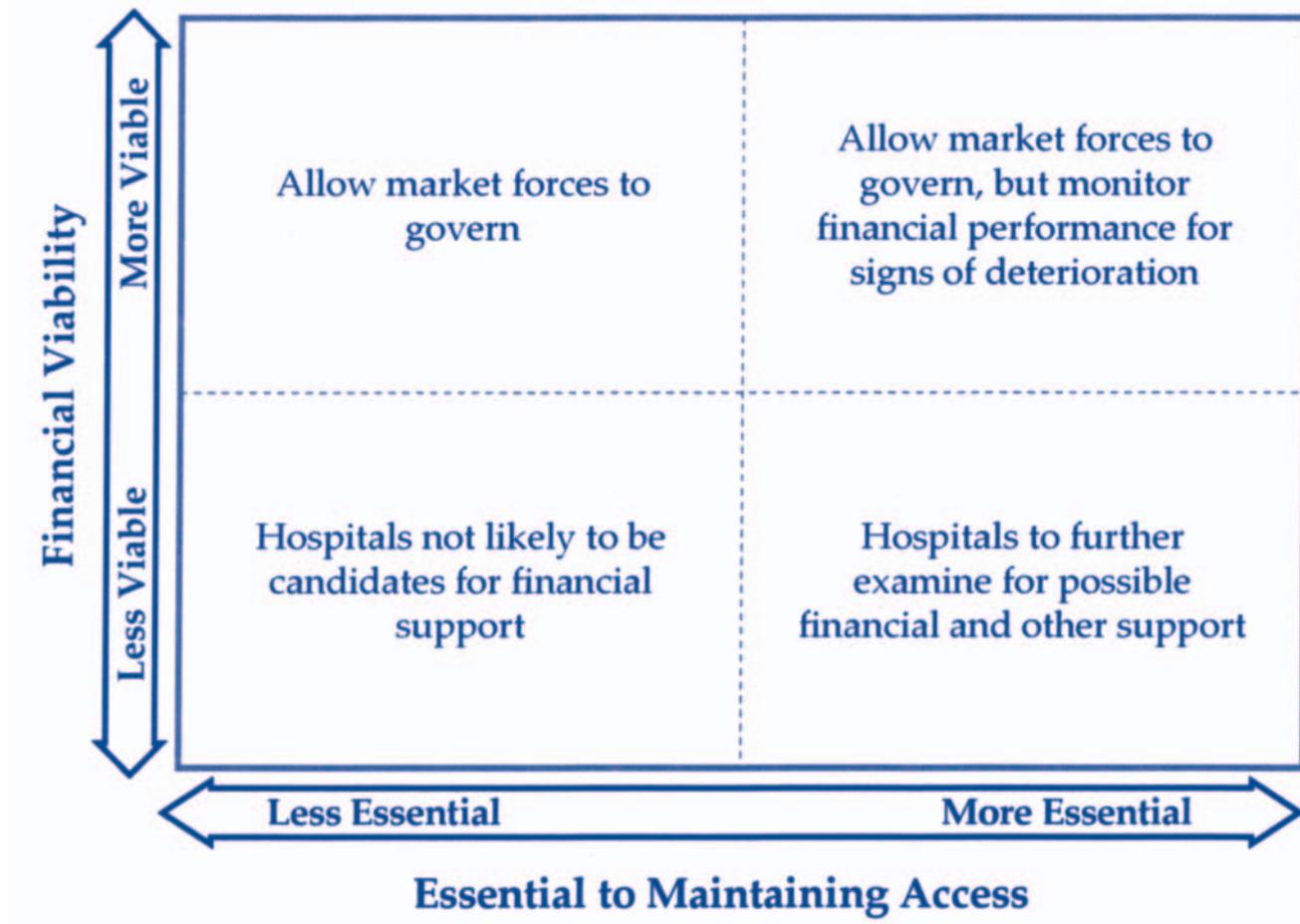
After standardizing each metric for “essentiality,” the individual standardized scores were combined into an overall weighted score for “essentiality,” assigning equal weights to all metrics. With this method, a positive score indicates a hospital is more essential than the average for all hospitals in the hospital market area and a negative score indicates a hospital is less essential than the average. Each hospital’s overall essentiality score is relative only to the other hospitals in its hospital

market area. A similar approach was used to develop an overall weighted score for each hospital’s financial viability.

V: Combining “Essentiality” and “Financial Viability”

Using the results of the essential hospital and financial viability analyses, each of the hospitals within a hospital market area can be categorized into one of the four quadrants illustrated in Figure 12.2. The mid-points on the horizontal and vertical axis represent the average “essentiality” score and the average “financial viability” score.

Figure 12.2:
Essentiality and Financial Viability Framework for Evaluating Hospitals



VI. Conclusion

This chapter provides an overview of the analytic approach to identifying which financially distressed hospitals in New Jersey are potential candidates for financial assistance from the State. It should be noted that the analytic framework represented by Figure 12.2 is based only on strictly quantifiable metrics. As such, it cannot possibly address all of the social, economic and geographic issues that must be examined by government in determining which financially distressed hospitals the State should support to maintain access to care. The quantitative analytic framework, therefore, must be supplemented by an assessment of non-quantifiable factors and input from policy analysts and policymakers regarding their knowledge of local conditions. In the end, mere numbers cannot take the place of sound judgment; they can only guide that judgment.

Among the non-quantitative issues that the Commission and State need to consider in determining which financially distressed hospitals are essential to maintaining access to hospital care, include but certainly are not limited to:

- Whether the services provided by a hospital are available and accessible elsewhere in the hospital market area;
- What the impact on residents would be in terms of travel time/distance to access hospital care in the event of a hospital's closure;
- Whether a hospital is part of a hospital system and the extent of the resources available to the system to support a financially distressed facility;
- What public transportation alterations or other transportation solutions are available or would be necessary to maintain access to care in the event of a hospital's closure;
- What quality of care and efficiency improvements are possible and necessary in financially distressed, essential hospitals;
- What potential access to care implications would be for particular medically underserved populations if a hospital were to close;
- What the potential impact on access to key ambulatory services would be if a hospital ceased operating as an inpatient facility;
- What the impact on employment in the hospital market area would be should a hospital close.

