Appendix 8.2: FINAL SUBCOMMITTEE REPORTS

Subcommittee Report 2:
Benchmarking for Efficiency and Quality

A. Overview

The Commission on Rationalizing Health Care Resources was established to advise the Governor on a strategy for supporting a system of high quality, affordable, cost effective and accessible care. On a national level, changes in health care delivery have resulted in changes in health care finances. This has resulted in financial problems for many New Jersey hospitals and requests for state financial subsidies. In response, the Governor established the Commission to evaluate health care delivery issues and to recommend a rational way to evaluate requests for financial assistance.

In its June 2007 Interim Report, the Commission proposed specific criteria to determine whether a hospital was essential to ensure the provision of the full scope of health care services for all regions of the state but not financially viable. In addition, the Commission wanted to ensure that state determinations about essential hospitals and financial distress also considered quality of care and efficiency. It is not reasonable to provide financial subsidies to a poor quality hospital or an inefficient organization.

Subcommittee Charge:

Therefore, the Commission established the Subcommittee on Benchmarking and Quality in fulfillment of Executive Order #39 to “Recommend the development of State policy to support essential general acute care hospitals that are financially distressed, including the development of performance and operational benchmarks for such hospitals,” and in order to ensure that:

- public funds are used to support efficient and high quality health care facilities, and
- decisions about whether a facility is essential should consider both quality and efficiency in addition to community need and financial performance.

Overview of Subcommittee Process:

The Subcommittee was formed in May 2007 and was composed of thirteen members representing health system management, medical and financial leadership as well as academic and consumer representatives (Appendix 8.2A). Two members of the Commission on Rationalizing Health Care Resources (David Hunter and JoAnn Pietro) served as Subcommittee members in order to ensure consistency with overall Commission needs and approach. Mr. Hunter and Robert Jacobs M.D. served as Subcommittee co-chairs. The Subcommittee met five times between June and August 2007 to review a general approach, to choose both quality and efficiency measures and to develop a strategy for responding to hospitals which request a subsidy. The goal was to ensure development of a high quality and financially secure health care system, through the use of quality and efficiency measures that serve as performance and operational benchmarks.

There was active discussion among Subcommittee members on all issues considering both theoretical and practical perspectives. Subcommittee members are actively involved in managing hospitals and dealing with financially troubled institutions and brought that experience to the discussion. There was substantial agreement among Subcommittee members on the criteria for choosing measures, the quality and efficiency measures selected and the ways to use those metrics. The Subcommittee developed an approach to reviewing hospitals in financial distress, developing agreements with those hospitals and monitoring performance.

The Subcommittee focused on the use of quality and efficiency measures but noted that issues being considered by other Commission Subcommittees (e.g., health care infrastructure including electronic medical records and physician practice patterns) were significant determinants of hospital operations and performance.
B. Measure Selection: General Approach to the Issue

The Subcommittee’s strategy was to select a wide range of measures which could be used to evaluate hospital performance and to determine whether operational changes were necessary. This dashboard for quality and efficiency could also be used to monitor hospital performance if a subsidy was provided by the State. The following criteria were used to guide measure selection:

- Clear data definitions of the measures must be available to ensure comparability across hospitals.
- Data must be currently available so that hospitals will not face additional data collection burdens.
- Measures should represent a broad range of areas including clinical quality, outcomes, financial performance and operating indicators, etc.
- Measures must be transparent so that calculation methods and data sources are specified and available.
- Different measures could be important for different hospitals because of areas of specialization.

Subcommittee members proposed a wide range of quality and efficiency measures for consideration. There was general agreement that the Subcommittee needed to create a broad dashboard to accurately reflect hospital performance. The Subcommittee evaluated those measures using the agreed-upon criteria.

When several measures covering the same area were recommended, one measure was chosen. Since measures need to be widely available for all NJ hospitals, a number of worthwhile measures were not included. There was also the recognition that while some proprietary systems could provide highly useful information about hospital operations, these systems could not be included since publicly available data was necessary.

There was general agreement that a hospital that applied for a subsidy might be asked to provide additional information to describe performance. These measures would be important to understand and evaluate a hospital’s performance but consistent statewide data may be unavailable.

C. Key Findings - Quality and Efficiency Measures

Based on these criteria, a dashboard of quality and efficiency measures was developed to give a broad picture of a hospital’s operations. The Subcommittee recommended that these measures be used to evaluate a hospital that applies for a special subsidy. For many of these measures, it will be possible to calculate both state and national medians to be used when evaluating individual hospitals. Whenever possible, a hospital will also be evaluated in terms of its percentile on each measure.

Recommended Quality Measures:

The recommended quality measures are presented in Table 1. These measures are based on a wide range of data sources and types of quality including consumer satisfaction, mortality and clinical process measures. The measures are largely based on information already collected by the Department of Health and Senior Services (DHSS):

- The perfect care scores can be calculated based on the patient level data already submitted for the New Jersey Annual Hospital Performance Report. The perfect care measures reflect how well a hospital provides all the correct care to a patient with a heart attack, pneumonia, congestive heart failure or a surgery patient.
- Mortality, readmission rates and average length of stay (ALOS) can be calculated using the hospital discharge data collected by the Department. The APR-DRG risk adjustment will be used when appropriate.
- H-CAHPS (Hospital-Consumer Assessment of Healthcare Providers and Systems) is a standardized survey to measure patients’ perspectives on hospital care within the following composites: Doctor Communication, Nurse Communication, Responsiveness of Hospital Staff, Cleanliness and Quiet Environment, Pain Management, Communication about Medicines and Discharge information. HCAHPs measures will be available on the CMS Hospital Compare and NJ Hospital Performance web sites.
• The Department will be collecting and publicly reporting on nosocomial infection rates as required by proposed legislation. Specific nosocomial infection measures will be defined by the Department through the regulatory process with the advice of the Department’s Quality Improvement Advisory Committee (QIAC).

• The Agency for Healthcare Research and Quality (AHRQ) has developed the Inpatient Quality Indicators (IQIs) which are a set of quality indicators which reflect mortality, utilization and volume based on hospital discharge data using the APR-DRGs.

When a hospital needs a subsidy, other issues would be addressed such as Board of Trustees involvement in quality oversight, inappropriate resource utilization, clinical efficiency and hospital resources allocated to quality improvement. The hospital might also be asked to provide information on pediatric care, obstetrical care and emergency care. These indicators are not part of the dashboard but could be considered for individual hospitals which apply for a subsidy.

**Recommended Efficiency Measures:**

*The recommended efficiency measures are presented in Table 2.* These measures assess a hospital’s costs, resource use, patient utilization review, staffing and revenue cycle management. All measures, except for the Denial Rate, can be calculated with information readily available from existing data bases maintained by DHSS:

• Data on full-time equivalent staffing, labor expenses and non-labor expenses are provided in the Hospital Cost Reports provided to the DHSS annually. The Subcommittee considered calculating the cost measures on a per admission or per-patient day basis; the Subcommittee chose per-admission because a hospital’s cost per day could be acceptable but the average length of stay too high. Admissions are adjusted for outpatient activity (using gross revenue figures from the Cost Reports) and case mix and severity (using APR-DRGs as applied to UB-92 admissions data). The CMI will include an adjustment for severity as well as to improve the consistency of these measures across hospitals.

• Already listed as a quality measure, average length of stay (ALOS) is included as an efficiency measure as well. The Subcommittee believes it is an indicator of the management’s ability to control utilization, and hence, costs, at the hospital. Data to calculate ALOS is included in the B-2 Reports provided quarterly to the DHSS. Like the cost measures, ALOS should be adjusted for case mix to ensure comparability across hospitals. The Subcommittee noted that the unique utilization patterns associated with obstetric and psychiatric services could make cross-hospital comparison misleading for facilities with large programs in these specialties.

• Although a hospital’s capital structure is essentially fixed in the short run, occupancy based on maintained beds is under management’s control in the short run. Low occupancy rates on maintained beds could be an indicator that the hospital is incurring costs to keep unneeded beds available. This measure can be calculated from data included in the quarterly B-2 Reports provided to the DHSS.

• Days in accounts receivable and average payment period can be calculated from data collected on a quarterly basis for the DHSS/NJ Health Care Facilities Financing Authority (HCFFA) financial data base. The Subcommittee considered other financial ratios (e.g., operating margin, debt service coverage ratio, days’ cash-on-hand). The Subcommittee felt that those measures could be significantly affected by factors and issues outside management’s control (e.g. payer mix) and therefore would not be good measures of efficiency. In contrast, days in accounts receivable and average payment period reflect the ability to effectively manage the process of generating and collecting patient bills and paying vendors with the resulting cash flow.

The denial rate is included as an efficiency measure although there is no consistent source for this indicator. Subcommittee members felt that it is another important measure of revenue cycle management and should be provided by hospitals seeking additional financial support.
D. Key Findings - Response to Hospitals in Financial Distress

The Subcommittee recommends that the following approach be used when a hospital requests a subsidy or some form of financial support:

- **Evaluation/Decision on Subsidy**

  If a hospital requests a subsidy or some form of financial assistance, the hospital is evaluated based on the criteria for financial distress and essential hospitals established by the Commission in order to determine whether a hospital is eligible for a subsidy. The final determination of a subsidy and the agreement between the hospital and DHSS is based on examining the hospital’s performance on the quality/efficiency dashboard. That review would consider the hospital requesting a subsidy as well as other hospitals in the area. The statewide benchmark would be viewed as a comparison but not the determining factor. The hospital could be asked to provide additional information based on areas of specialization (e.g., pediatric care) or to review areas (e.g., denial rates) where consistent statewide data are not available. The Department should also review administrative overhead expenses to ensure that expenditures are reasonable.

  The decision on whether to provide a subsidy and the amount of that subsidy will depend on this evaluation and the amount of funds available considering other hospitals requesting assistance.

- **Development of an Agreement**

  If a decision is made to provide a subsidy, the Department and the hospital will form an agreement to ensure that public funds are appropriately spent. That agreement will involve one or more of the following components:

  - DHSS and the hospital will agree on an action plan to resolve the issues identified in the DHSS review or issues identified by the hospital. This may be developed by the hospital’s management and may require a consultant or some new executive leadership.
  - The hospital may be required to retain new executive leadership.
  - The hospital agrees to meet specified targets on the quality/efficiency dashboard. Those targets will be developed based on state and/or national performance norms and the hospital’s current performance. Other financial indicators may also be included in the agreement as described above.
  - The hospital might be required to contract with a management consultant in order to evaluate and improve its operations.
  - The hospital may be required to add specific members to its Board of Trustees and/or Finance Committee in order to support changes in policy/operations. These members would be chosen to provide the appropriate skills based on the operating/financial issues and/or clinical identified during the evaluation process. These members would convey the DHSS position to the Board and provide relevant information to the Department.
  - The hospital may be required to form a specified relationship with a hospital system which would provide greater financial stability, strategic planning skills or executive leadership. That relationship could take one of several forms, i.e., a cooperative contract, an affiliation or a change in ownership.
  - DHSS will be invited to all Board of Trustees meetings and receive all appropriate materials during the agreed upon contract period.
  - The hospital will be required to provide specific operational information at regular intervals based on the agreement.

- **Implementation/Monitoring**

  The Department will monitor the hospital quarterly and as often as monthly in order to ensure compliance with the agreement and that the hospital is moving toward financial, operational and clinical targets.

  - If the hospital does not meet specified quarterly targets, a corrective action plan would need to be prepared for DHSS review.
• Continuation of the subsidy is dependent on the hospital meeting specified targets.

• The subsidy will be subject to review based on the state’s financial resources.

E. Additional Issues

During the course development of the quality/efficiency dashboard and the response to hospitals which request a subsidy, the Subcommittee made the following recommendations:

• Given the importance of and recent emphasis on quality indicators, the State may want to consider additional data collection in this area as part of a longer-term strategy. Those measures that warrant future consideration include: Institute of Healthcare Improvement (IHI) safety measures; computerized physician order entry (CPOE), medical staff qualifications, such as board certification and/or eligibility, nurse staffing and agency nursing percentages.

• Ensuring quality and efficiency requires both market and financial viability to eventually fund an infrastructure-culture, people, tools, processes. Decisions on support must consider whether funds are available to create an infrastructure to support a quality performance operation.

• The Subcommittee agreed that information which the Department creates for the quality/efficiency dashboard should be available to the public.
### Table 1: Quality Measures

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Available for All Hospitals*</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perfect Care Scores: AMI, pneumonia, CHF, SCIP</strong></td>
<td>Yes</td>
<td>DHSS based on information collected for Hospital Performance Report</td>
</tr>
<tr>
<td><strong>Nosocomial Infection Rates</strong></td>
<td>Yes in 2009</td>
<td>DHSS will phase-in based on hospital reports</td>
</tr>
<tr>
<td><strong>Hospital CAHPS</strong></td>
<td>Yes in 2008</td>
<td>CMS</td>
</tr>
<tr>
<td><strong>Mortality-Risk Adjusted for top 10 DRGs</strong></td>
<td>Yes</td>
<td>DHSS based on APR-DRGs</td>
</tr>
<tr>
<td><strong>AHRQ IQI Mortality:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pneumonia</td>
<td>Yes</td>
<td>DHSS calculates using AHRQ software and APR-DRGs</td>
</tr>
<tr>
<td>• CHF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• AMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>30 day Readmission Rates for top 10 DRGs</strong></td>
<td>Yes</td>
<td>DHSS based on APR-DRGs</td>
</tr>
<tr>
<td><strong>ALOS-Risk Adjusted for top 10 DRGs</strong></td>
<td>Yes</td>
<td>DHSS based on APR-DRGs</td>
</tr>
<tr>
<td><strong>Accreditation Status</strong></td>
<td>Yes</td>
<td>Joint Commission</td>
</tr>
</tbody>
</table>

* Yes indicates that the measure may be calculated based on existing data.
### Table 2: Efficiency Measures

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Available for All Hospitals*</th>
<th>Source</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTE per adjusted occupied bed</td>
<td>Yes</td>
<td>DHSS Cost Reports and UB-92 data</td>
<td>Adjust volume for outpatient activity (using gross revenue), case mix/severity (using APR-DRGs)</td>
</tr>
<tr>
<td>Labor expense per adjusted admission</td>
<td>Yes</td>
<td>DHSS Cost Reports and UB-92 data</td>
<td>Adjust volume for outpatient activity (using gross revenue), case mix/severity (using APR-DRGs)</td>
</tr>
<tr>
<td>Non-labor expense per adjusted admission</td>
<td>Yes</td>
<td>DHSS Cost Reports and UB-92 data</td>
<td>Adjust volume for outpatient activity (using gross revenue), case mix/severity (using APR-DRGs)</td>
</tr>
<tr>
<td>Total expense per adjusted admission</td>
<td>Yes</td>
<td>DHSS Cost Reports and UB-92 data</td>
<td>Adjust volume for outpatient activity (using gross revenue), case mix/severity (using APR-DRGs)</td>
</tr>
<tr>
<td>Case mix adjusted ALOS</td>
<td>Yes</td>
<td>DHSS B-2 Forms and UB-92 data</td>
<td>Use APR-DRGs to calculate case mix index</td>
</tr>
<tr>
<td>Occupancy (maintained beds)</td>
<td>Yes</td>
<td>DHSS B-2 Forms</td>
<td>Licensed beds are fixed in short run but maintained beds can be adjusted.</td>
</tr>
<tr>
<td>Days in accounts receivable</td>
<td>Yes</td>
<td>DHSS/NJHCFFA Financial data base</td>
<td>Measures efficiency of revenue cycle management.</td>
</tr>
<tr>
<td>Average payment period</td>
<td>Yes</td>
<td>DHSS/NJHCFFA Financial data base</td>
<td>Measures efficiency of revenue cycle management.</td>
</tr>
<tr>
<td>Denial rate</td>
<td>No</td>
<td>Voluntary reporting from hospitals</td>
<td>Will not calculate statewide benchmark but will use as additional information to evaluate revenue cycle management</td>
</tr>
</tbody>
</table>

*Yes indicates that the measures may be calculated based on existing data.*
Appendix 8.2A
Benchmarking for Efficiency and Quality
Subcommittee Membership

David P. Hunter, MPH, Co-Chair
Health Care Consultant
Commission Member

Robert Jacobs, MD, Co-Chair
Acting Chief Medical Officer
Jersey City Medical Center

Philip Bonaparte, MD
Chief Medical Officer
Horizon NJ

Maureen Bueno, RN, PhD
Exec. Director of Practice Operations
RWJ Univ. Medical Group

Derek DeLia, PhD
Senior Policy Analyst
Rutgers Center for State Health Policy

Peter Gross, MD
Sr.Vice President & Chief Medical Officer
Hackensack University Medical Center

Aline Holmes, RN, MSN
Senior Vice President, Clinical Affairs
New Jersey Hospital Association

Robert Iannaccone
Executive Vice President and COO
St. Mary’s Hospital

David Knowlton
President and CEO
NJ Health Care Quality Institute

Richard P. Miller
President & CEO
Virtua Health

William Phillips
Senior VP Finance and CFO
Jersey Shore University Medical Center

JoAnn Pietro, RN, JD
Partner
Wahrenberger, Pietro and Sherman LLP
Commission Member

Trish Zita
The Kaufman-Zita Group

Staff

Cynthia Kirchner, Lead Staff
Senior Policy Advisor
Department of Health and Senior Services

Stephen Fillebrown
Director
Research and Investor Relations
Health Care Facilities Financing Authority

Emmanuel Noggoh
Director
Health Care Quality Assessment
Department of Health and Senior Services

Frances Prestianni
Program Manager
Health Care Quality Assessment
Department of Health and Senior Services