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Appendix 1: **DARTMOUTH ATLAS-DEFINED HOSPITAL REFERRAL REGIONS FOR NEW JERSEY AREA**
### Appendix 2: Adjustments to Dartmouth Atlas-Defined Hospital Referral Regions to Form New Jersey Hospital Market Areas

<table>
<thead>
<tr>
<th>Dartmouth Atlas-defined Hospital Service Area</th>
<th>Dartmouth Atlas-defined Hospital Referral Region</th>
<th>Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillipsburg</td>
<td>Allentown, Pennsylvania</td>
<td>Reassigned from Allentown to Morristown Hospital Referral Region</td>
</tr>
<tr>
<td>Flemington</td>
<td>Philadelphia, Pennsylvania</td>
<td>Reassigned from Philadelphia to New Brunswick Hospital Referral Region</td>
</tr>
<tr>
<td>Trenton</td>
<td>Philadelphia, Pennsylvania</td>
<td>Treated as its own hospital market area</td>
</tr>
<tr>
<td>Twenty Hospital Service Areas in central and southern New Jersey</td>
<td>Camden, New Jersey</td>
<td>Divided into three market areas:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Toms River</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Atlantic City</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Camden</td>
</tr>
<tr>
<td>Woodbury</td>
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<td>Reassigned from Philadelphia to Camden market area</td>
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<tr>
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<td>Wilmington, Delaware</td>
<td>Reassigned from Wilmington to the Atlantic City market area</td>
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<td>Ridgewood, New Jersey</td>
<td>Combined with Hackensack and Paterson Hospital Referral Regions</td>
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<tr>
<td>Paterson</td>
<td>Paterson, New Jersey</td>
<td>Combined with Hackensack and Ridgewood Hospital Referral Regions</td>
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## Appendix 3: New Jersey Acute Care Hospitals by Hospital Market Area

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<thead>
<tr>
<th>Hospital</th>
<th>Hospital Market Area</th>
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</thead>
<tbody>
<tr>
<td>Bayonne Medical Center</td>
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</tr>
<tr>
<td>Christ Hospital</td>
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</tr>
<tr>
<td>Clara Maass Medical Center</td>
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<tr>
<td>Columbus Hospital</td>
<td>Newark/Jersey City</td>
</tr>
<tr>
<td>East Orange General Hospital</td>
<td>Newark/Jersey City</td>
</tr>
<tr>
<td>Greenville Hospital</td>
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<tr>
<td>Newark Beth Israel Medical Center</td>
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<tr>
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<td>Newark/Jersey City</td>
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<td>Saint James Hospital</td>
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</tr>
<tr>
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<td>Trinitas Hospital - Williamson Street Campus</td>
<td>Newark/Jersey City</td>
</tr>
<tr>
<td>UMDNJ-University Hospital</td>
<td>Newark/Jersey City</td>
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<td>Union Hospital</td>
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<td>Barnert Hospital</td>
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<td>Chilton Memorial Hospital</td>
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<td>Englewood Hospital and Medical Center</td>
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<tr>
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<td>Palisades Medical Center of New York</td>
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<td>PBI Regional Medical Center</td>
<td>Hackensack, Ridgewood and Paterson</td>
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<td>St. Joseph's Hospital and Medical Center</td>
<td>Hackensack, Ridgewood and Paterson</td>
</tr>
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<td>St. Joseph's Wayne Hospital</td>
<td>Hackensack, Ridgewood and Paterson</td>
</tr>
<tr>
<td>Hoboken University Medical Center</td>
<td>Hackensack, Ridgewood and Paterson</td>
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<td>Hospital</td>
<td>Hospital Market Area</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>St. Mary's Hospital</td>
<td>Hackensack, Ridgewood and Paterson</td>
</tr>
<tr>
<td>The Valley Hospital</td>
<td>Hackensack, Ridgewood and Paterson</td>
</tr>
<tr>
<td>Hackettstown Regional Medical Center</td>
<td>Morristown</td>
</tr>
<tr>
<td>Morristown Memorial Hospital</td>
<td>Morristown</td>
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<td>Muhlenberg Regional Medical Center, Inc.</td>
<td>Morristown</td>
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<tr>
<td>Newton Memorial Hospital</td>
<td>Morristown</td>
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<tr>
<td>Overlook Hospital</td>
<td>Morristown</td>
</tr>
<tr>
<td>Saint Clare's Hospital/Denville Campus</td>
<td>Morristown</td>
</tr>
<tr>
<td>Saint Clare's Hospital/Dover General</td>
<td>Morristown</td>
</tr>
<tr>
<td>Saint Clare's Hospital/Sussex</td>
<td>Morristown</td>
</tr>
<tr>
<td>Warren Hospital</td>
<td>Morristown</td>
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<tr>
<td>Hunterdon Medical Center</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>JFK Medical Center</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>Raritan Bay Medical Center - Old Bridge Division</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>Raritan Bay Medical Center - Perth Amboy Division</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>Robert Wood Johnson University Hospital</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>Saint Peter's University Hospital</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>Somerset Medical Center</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>University Medical Center at Princeton</td>
<td>New Brunswick</td>
</tr>
<tr>
<td>Bayshore Community Hospital</td>
<td>Toms River</td>
</tr>
<tr>
<td>CentraState Medical Center</td>
<td>Toms River</td>
</tr>
<tr>
<td>Community Medical Center</td>
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</tr>
<tr>
<td>Jersey Shore University Medical Center</td>
<td>Toms River</td>
</tr>
<tr>
<td>Kimball Medical Center</td>
<td>Toms River</td>
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<tr>
<td>Monmouth Medical Center</td>
<td>Toms River</td>
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<td>Ocean Medical Center</td>
<td>Toms River</td>
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<td>Riverview Medical Center</td>
<td>Toms River</td>
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<tr>
<td>Capital Health System at Fuld</td>
<td>Trenton</td>
</tr>
<tr>
<td>Capital Health System at Mercer</td>
<td>Trenton</td>
</tr>
<tr>
<td>Robert Wood Johnson University Hospital at Hamilton</td>
<td>Trenton</td>
</tr>
<tr>
<td>St. Francis Medical Center</td>
<td>Trenton</td>
</tr>
<tr>
<td>Cooper Hospital/University Medical Center</td>
<td>Camden</td>
</tr>
<tr>
<td>Hospital</td>
<td>Hospital Market Area</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------</td>
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<tr>
<td>Kennedy Memorial Hospitals-University Medical Center, Cherry Hill</td>
<td>Camden</td>
</tr>
<tr>
<td>Kennedy Memorial Hospitals-University Medical Center, Stratford</td>
<td>Camden</td>
</tr>
<tr>
<td>Kennedy Memorial Hospitals-University Medical Center, Turnersville</td>
<td>Camden</td>
</tr>
<tr>
<td>Lourdes Medical Center of Burlington County</td>
<td>Camden</td>
</tr>
<tr>
<td>Our Lady of Lourdes Medical Center</td>
<td>Camden</td>
</tr>
<tr>
<td>Underwood-Memorial Hospital</td>
<td>Camden</td>
</tr>
<tr>
<td>Virtua-Memorial Hospital of Burlington County, Inc.</td>
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</tr>
<tr>
<td>Virtua-West Jersey Hospital Berlin</td>
<td>Camden</td>
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<tr>
<td>Virtua-West Jersey Hospital Marlton</td>
<td>Camden</td>
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<tr>
<td>Virtua-West Jersey Hospital Voorhees</td>
<td>Camden</td>
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<tr>
<td>AtlantiCare Regional Medical Center, Inc.</td>
<td>Atlantic City</td>
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<tr>
<td>AtlantiCare Regional Medical Center, Inc.</td>
<td>Atlantic City</td>
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<tr>
<td>Burdette Tomlin Memorial Hospital, Inc.</td>
<td>Atlantic City</td>
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<tr>
<td>Shore Memorial Hospital</td>
<td>Atlantic City</td>
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<tr>
<td>South Jersey Healthcare Regional Medical Center</td>
<td>Atlantic City</td>
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<td>South Jersey Hospital - Elmer</td>
<td>Atlantic City</td>
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<tr>
<td>Southern Ocean County Hospital</td>
<td>Atlantic City</td>
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<tr>
<td>The Memorial Hospital of Salem County</td>
<td>Atlantic City</td>
</tr>
<tr>
<td>William B. Kessler Memorial Hospital, Inc.</td>
<td>Atlantic City</td>
</tr>
</tbody>
</table>
Appendix 4: NEW JERSEY POPULATION AND INPATIENT HOSPITAL VOLUME PROJECTIONS – ADDITIONAL INFORMATION

In this Appendix, population projections are provided for New Jersey at the State level and at the individual market area level. Inpatient volume projections are also provided at the individual market level.

Figure 1 below compares New Jersey’s 2005 population and population projections for 2010 and 2015 by age composition to the U.S. as a whole. The Figure illustrates that New Jersey’s proportion of population age 18 to 44 is projected to be slightly smaller and its population age 45 to 64 slightly larger than the nation as a whole in 2015.

Figure 1

Figure 2 on the following page shows that there is variation in the 2005 and projected 2015 population age composition across the eight New Jersey market areas. In 2005, the Toms River and Atlantic City areas had the highest proportions of population in the 65 and over age group. By 2015, the 65 and over age group is projected to comprise 19 percent of the Toms River area’s and 16 percent of the Atlantic City area’s and Hackensack, Ridgewood and Paterson areas’ total population.

As described in Chapter 4, to remove the effect of age composition and mix of services variations across market areas, we compared use rates and ALOS across market areas for 10 high volume DRGs for the 45 to 64 age group. Exhibits 1 and 2 illustrate the variation in use rates and ALOS for the 10 high volume DRGs across the eight market areas.
Figure 2
Age Composition of Population by Market Area (2005, and Projected 2010 and 2015)
# Exhibit 1

**Use Rate (Discharge per 1,000 Population) in 10 High Volume DRGs for New Jersey Residents’ Age 45 - 64 by Market Area of Residence (2005)**

<table>
<thead>
<tr>
<th>DRG</th>
<th>Description</th>
<th>Atlantic City</th>
<th>Camden</th>
<th>Hackensack, Ridge, and Paterson</th>
<th>Morristown</th>
<th>New Brunswick</th>
<th>Newark</th>
<th>Toms River</th>
<th>Trenton</th>
<th>Entire State</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Stroke with Infarction</td>
<td>1.10</td>
<td>0.99</td>
<td>0.79</td>
<td>0.49</td>
<td>0.76</td>
<td>1.35</td>
<td>0.81</td>
<td>1.33</td>
<td>0.91</td>
</tr>
<tr>
<td>88</td>
<td>Chronic Obstructive Pulmonary Disease</td>
<td>2.91</td>
<td>2.51</td>
<td>1.72</td>
<td>1.29</td>
<td>1.34</td>
<td>3.01</td>
<td>2.22</td>
<td>3.28</td>
<td>2.14</td>
</tr>
<tr>
<td>89</td>
<td>Simple Pneumonia and Pleurisy Age above 17 with Complications and Comorbidities</td>
<td>2.11</td>
<td>1.62</td>
<td>1.26</td>
<td>1.28</td>
<td>1.21</td>
<td>2.03</td>
<td>1.41</td>
<td>2.21</td>
<td>1.55</td>
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<tr>
<td>541</td>
<td>Respiratory Disorder Except Infections, Bronchitis, Asthma with Major Complications and Comorbidities</td>
<td>1.71</td>
<td>1.15</td>
<td>0.84</td>
<td>0.79</td>
<td>0.89</td>
<td>1.51</td>
<td>1.50</td>
<td>1.19</td>
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<td>127</td>
<td>Heart Failure and Shock</td>
<td>2.32</td>
<td>1.80</td>
<td>1.39</td>
<td>0.90</td>
<td>1.01</td>
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<td>1.49</td>
<td>3.13</td>
<td>1.98</td>
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<td>143</td>
<td>Chest Pain</td>
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<td>4.40</td>
<td>3.78</td>
<td>4.66</td>
<td>6.98</td>
<td>4.90</td>
<td>6.46</td>
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<td>Congestive Heart Failure and Cardiac Arrhythmia with Major Complications and Comorbidities</td>
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<td>0.58</td>
<td>0.49</td>
<td>0.30</td>
<td>0.55</td>
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<td>0.77</td>
<td>0.95</td>
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<td>854</td>
<td>Percutaneous Cardiovascular Procedure with Drug-Eluting Stent without Acute Myocardial Infarction</td>
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<td>2.12</td>
<td>2.47</td>
<td>2.09</td>
<td>2.63</td>
<td>3.33</td>
<td>2.91</td>
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<td>2.54</td>
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<td>359</td>
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<td>3.53</td>
<td>3.37</td>
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<td>3.80</td>
<td>4.25</td>
<td>3.76</td>
<td>3.99</td>
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<td>Psychoses</td>
<td>4.23</td>
<td>3.32</td>
<td>4.72</td>
<td>3.82</td>
<td>1.98</td>
<td>6.32</td>
<td>5.07</td>
<td>3.53</td>
<td>4.27</td>
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</table>
### Exhibit 2
ALOS in 10 High Volume DRGs for New Jersey Residents’ Age 45-64 by Market Area of Residence (2005)

<table>
<thead>
<tr>
<th>DRG</th>
<th>Description</th>
<th>Atlantic City</th>
<th>Camden</th>
<th>Hackensack, Ridge, and Paterson</th>
<th>Morristown</th>
<th>New Brunswick</th>
<th>Newark</th>
<th>Toms River</th>
<th>Trenton</th>
<th>Entire State</th>
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</thead>
<tbody>
<tr>
<td>14</td>
<td><strong>Stroke with Infarction</strong></td>
<td>5.4</td>
<td>4.9</td>
<td>5.6</td>
<td>5.2</td>
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<td>5.6</td>
<td>5.3</td>
</tr>
<tr>
<td>88</td>
<td><strong>Chronic Obstructive Pulmonary Disease</strong></td>
<td>4.2</td>
<td>4.2</td>
<td>4.9</td>
<td>4.7</td>
<td>5.6</td>
<td>5.2</td>
<td>4.7</td>
<td>4.4</td>
<td>4.8</td>
</tr>
<tr>
<td>89</td>
<td><strong>Simple Pneumonia and Pleurisy Age above 17 with Complications and Comorbidities</strong></td>
<td>5.0</td>
<td>4.9</td>
<td>5.6</td>
<td>4.7</td>
<td>5.3</td>
<td>5.7</td>
<td>5.1</td>
<td>5.4</td>
<td>5.3</td>
</tr>
<tr>
<td>541</td>
<td><strong>Respiratory Disorder Except Infections, Bronchitis, Asthma with Major Complications and Comorbidities</strong></td>
<td>7.0</td>
<td>6.9</td>
<td>8.6</td>
<td>7.7</td>
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<td>7.7</td>
<td>7.0</td>
<td>7.9</td>
</tr>
<tr>
<td>127</td>
<td><strong>Heart Failure and Shock</strong></td>
<td>4.4</td>
<td>4.1</td>
<td>5.1</td>
<td>4.3</td>
<td>4.7</td>
<td>5.0</td>
<td>4.4</td>
<td>4.6</td>
<td>4.7</td>
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<tr>
<td>143</td>
<td><strong>Chest Pain</strong></td>
<td>1.9</td>
<td>1.7</td>
<td>1.8</td>
<td>1.5</td>
<td>1.8</td>
<td>2.2</td>
<td>1.9</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>544</td>
<td><strong>Congestive Heart Failure and Cardiac Arrhythmia with Major Complications and Comorbidities</strong></td>
<td>7.4</td>
<td>7.3</td>
<td>8.4</td>
<td>7.3</td>
<td>10.5</td>
<td>8.6</td>
<td>8.1</td>
<td>8.6</td>
<td>8.3</td>
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<tr>
<td>854</td>
<td><strong>Percutaneous Cardiovascular Procedure with Drug-Eluting Stent without Acute Myocardial Infarction</strong></td>
<td>2.0</td>
<td>1.9</td>
<td>1.7</td>
<td>1.5</td>
<td>1.5</td>
<td>1.8</td>
<td>1.4</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>359</td>
<td><strong>Uterine and Adnexa Procedures for Cancer In situ and Non-Malignancy without Complications and Comorbidities</strong></td>
<td>2.3</td>
<td>2.2</td>
<td>2.4</td>
<td>2.2</td>
<td>2.2</td>
<td>2.4</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>430</td>
<td><strong>Psychoses</strong></td>
<td>6.7</td>
<td>8.0</td>
<td>12.5</td>
<td>8.9</td>
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<td>10.4</td>
<td>8.8</td>
<td>10.0</td>
<td>9.8</td>
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</table>
Figure 3 illustrates 2005 use rates compared to projected 2010 and 2015 use rates under the two projection scenarios.

**Figure 3**  
*Use Rates for New Jersey Residents by Market Area*  
*(2005 and projected 2010 and 2015)*
The Commission used two primary data sources to provide current and historical financial data: the Medicare Cost Report (Worksheet G), and audited financial statements.

The Medicare Cost Report is an annual report submitted to the Centers for Medicare and Medicaid Services (CMS) by all Medicare providers (any hospital that receives federal Medicare/Medicaid funds). The report is comprehensive – hospitals report total costs, not just Medicare costs – and requires information on administrative structure, staffing and utilization of services, as well as financial data. Medicare Cost Reports are maintained in the Healthcare Cost Report Information System (HCRIS), a national data reporting system. Currently, the most recent data available for all hospitals is for FY 2005.

The New Jersey Health Care Facilities Financing Authority (NJHCFFA), the State’s primary issuer of municipal bonds for New Jersey’s health care organizations, provided hospitals and hospital systems’ audited financial statements. During its 35-year history, the NJHCFFA has issued more than $13 billion in bonds on behalf of over 140 health care organizations throughout the State. New Jersey hospitals submit audited financial statements to NJHCFFA for review and inclusion in a database used for on-going monitoring and analysis. Although FY 2005 is the most current year for which NJHCFFA has a complete set of audited reports, as of November 2007, all but 11 hospitals have submitted their FY 2006 audited financial data to NJHCFFA.

The Medicare Cost Reports have the advantage of providing a national database, collected through a standardized form, which allows for state-by-state comparisons. However, an independent party does not review the reports. Further, inconsistent or incomplete reporting of certain financial elements limits the ability to calculate key financial ratios. For example, reporting non-operating gains and losses is not consistent across hospitals, which limits the ability to compare operating and total margins from facility to facility. In addition, this will cause the operating margin to be equal to or greater than the total margin. As another example, the Medicare Cost Report does not include a line item for board-designated funds; without this element, days cash-on-hand as conventionally defined cannot be calculated.

Audited financial statements are reviewed by an independent third party. Further, the requirement that the statements be prepared in accordance with Generally Accepted Accounting Principles (GAAP) reduces the inconsistency in reporting of financial elements from hospital to hospital. However, with few exceptions, it is difficult to get state-by-state data based on audited financial statements.

The primary value of unaudited statements is that they are usually available within 45 to 60 days from the end of a period. In contrast, audited financial statements are not usually available until 120 to 150 days after the fiscal year ends; cost reports are usually not available until six or more months after the year ends. Thus, unaudited statements will typically provide the most current picture of a hospital’s financial condition. The primary disadvantage of unaudited statements is that they have not been reviewed by an independent outside party. In some cases, there may be material differences between the unaudited and audited statements based on the findings of that outside review. Therefore, unaudited statements should be analyzed with caution.
The methodology for comparing hospitals is based on the average for each metric for all hospitals in the hospital’s market area.

A score is established equal to the number of standard deviations away from the average for each hospital. A positive score indicates a hospital is more essential than the average for all hospitals in the area and a negative score indicates a hospital is less essential than the average.

The formula used for converting a hospital’s metric on a certain variable (e.g., number of Medicaid and uninsured discharges and ER visits, occupancy rate, etc.) into its equivalent standardized value is as follows:

\[
\text{Standardized Score} = \frac{(\text{Individual Hospital Metric Value} - \text{Average for All Hospitals in the Market Area})}{\text{Standard Deviation of the Metric for the Area}}
\]

By subtracting the average of the metric for the relevant hospital market area from the observed value of the metric for a given hospital and then by dividing it by that metric’s dispersion (standard deviation) across hospitals in that area, one arrives at a new variable whose average across the area must, by construction, be 0 and whose measure of dispersion (standard deviation) is 1.

If this is done for every metric, then, regardless of the size and dimension of each metric, all standardized metrics will have an across-market-area average of 0 and a dispersion (standard deviation) of 1. Because these standardized variables are now similar, one can add them up, by weighting each, to arrive at an overall weighted average score that may reflect many distinct metrics.

On the following pages in Tables 1 and 2, examples are provided of this method for standardizing two of the essentiality metrics, one that is numbers (number of Medicaid and uninsured ER visits) and one that is percentages (occupancy rate).
### Table 1
Method for Standardizing Metrics Example: Medicaid and Uninsured ED Visits

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Observed Value for Number of Medicaid and Uninsured ER Visits</th>
<th>Average Number of Medicaid and Uninsured ER Visits for Market Area</th>
<th>Observed Value less Average</th>
<th>Standard Deviation</th>
<th>Standardized Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5,562</td>
<td>13,827</td>
<td>-8,265</td>
<td>9,935</td>
<td>-0.83</td>
</tr>
<tr>
<td>B</td>
<td>5,732</td>
<td>13,827</td>
<td>-8,095</td>
<td>9,935</td>
<td>-0.81</td>
</tr>
<tr>
<td>C</td>
<td>6,231</td>
<td>13,827</td>
<td>-7,596</td>
<td>9,935</td>
<td>-0.76</td>
</tr>
<tr>
<td>D</td>
<td>6,281</td>
<td>13,827</td>
<td>-7,546</td>
<td>9,935</td>
<td>-0.76</td>
</tr>
<tr>
<td>E</td>
<td>7,951</td>
<td>13,827</td>
<td>-5,876</td>
<td>9,935</td>
<td>-0.59</td>
</tr>
<tr>
<td>F</td>
<td>9,159</td>
<td>13,827</td>
<td>-4,668</td>
<td>9,935</td>
<td>-0.47</td>
</tr>
<tr>
<td>G</td>
<td>11,484</td>
<td>13,827</td>
<td>-2,343</td>
<td>9,935</td>
<td>-0.24</td>
</tr>
<tr>
<td>H</td>
<td>12,028</td>
<td>13,827</td>
<td>-1,799</td>
<td>9,935</td>
<td>-0.18</td>
</tr>
<tr>
<td>I</td>
<td>15,333</td>
<td>13,827</td>
<td>1,507</td>
<td>9,935</td>
<td>0.15</td>
</tr>
<tr>
<td>J</td>
<td>20,500</td>
<td>13,827</td>
<td>6,674</td>
<td>9,935</td>
<td>0.67</td>
</tr>
<tr>
<td>K</td>
<td>31,550</td>
<td>13,827</td>
<td>17,724</td>
<td>9,935</td>
<td>1.78</td>
</tr>
<tr>
<td>L</td>
<td>34,107</td>
<td>13,827</td>
<td>20,281</td>
<td>9,935</td>
<td>2.04</td>
</tr>
<tr>
<td>Average</td>
<td>13,827</td>
<td></td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Standard Dev.</td>
<td>9,935</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>
### Table 2
Method for Standardizing Metrics Example: Inpatient Occupancy Rates

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Observed Value for Occupancy Rate</th>
<th>Average Occupancy Rate</th>
<th>Observed Value less Average</th>
<th>Standard Deviation</th>
<th>Standardized Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>47%</td>
<td>72%</td>
<td>-25%</td>
<td>11%</td>
<td>-2.33</td>
</tr>
<tr>
<td>B</td>
<td>59%</td>
<td>72%</td>
<td>-13%</td>
<td>11%</td>
<td>-1.25</td>
</tr>
<tr>
<td>C</td>
<td>68%</td>
<td>72%</td>
<td>-4%</td>
<td>11%</td>
<td>-0.39</td>
</tr>
<tr>
<td>D</td>
<td>70%</td>
<td>72%</td>
<td>-2%</td>
<td>11%</td>
<td>-0.19</td>
</tr>
<tr>
<td>E</td>
<td>70%</td>
<td>72%</td>
<td>-2%</td>
<td>11%</td>
<td>-0.15</td>
</tr>
<tr>
<td>D</td>
<td>74%</td>
<td>72%</td>
<td>2%</td>
<td>11%</td>
<td>0.19</td>
</tr>
<tr>
<td>F</td>
<td>76%</td>
<td>72%</td>
<td>4%</td>
<td>11%</td>
<td>0.36</td>
</tr>
<tr>
<td>G</td>
<td>78%</td>
<td>72%</td>
<td>6%</td>
<td>11%</td>
<td>0.59</td>
</tr>
<tr>
<td>H</td>
<td>79%</td>
<td>72%</td>
<td>7%</td>
<td>11%</td>
<td>0.67</td>
</tr>
<tr>
<td>I</td>
<td>82%</td>
<td>72%</td>
<td>10%</td>
<td>11%</td>
<td>0.95</td>
</tr>
<tr>
<td>J</td>
<td>82%</td>
<td>72%</td>
<td>10%</td>
<td>11%</td>
<td>0.96</td>
</tr>
<tr>
<td>K</td>
<td>83%</td>
<td>72%</td>
<td>11%</td>
<td>11%</td>
<td>1.03</td>
</tr>
<tr>
<td>Average</td>
<td>72%</td>
<td></td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Standard Dev.</td>
<td>11%</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>
As these two example show, the variation in the observed values is very different for the two metrics: for the number of Medicaid and uninsured ER visits, the dispersion (standard deviation) is 9,935, while the dispersion for occupancy rates is 11%. However, the standardized scores in Column E account for these different dispersions in the observed values for the metrics. For example, Hospital I has 6,674 more Medicaid and uninsured ER visits than the average for all the hospitals in the market area and this yields a standardized score of .67. For the occupancy rate metric, Hospital H’s occupancy rate is 7 percent greater than the average occupancy rate for all hospitals in the market area, and its standardized score is also .67. In standardized terms, both Hospital I and Hospital K are 0.67 above the average for these two different metrics. Standardizing allows for hospitals’ observed values to become "unit free", thus enabling them to be added across all the essentiality metrics.

Under this method, each hospital’s overall essentiality score is relative only to the other hospitals in its market area; it is not valid to compare hospitals’ essentiality scores across different market areas.

The Commission used the same methodology for scoring each hospital on the three financial viability metrics, except that it compared all hospitals in the State against the statewide average for the metric rather than against the average for the market area. Since higher values of Long-term Debt to Capitalization put a hospital at greater risk, the score was inverted 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.
## Appendix 7: ISSUES TO ADDRESS IN CLOSING A HOSPITAL

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and Authority</td>
<td>Determine who will oversee the closure process (<em>the hospital’s board, a special committee or task force?</em>) and the scope of authority that group and management will have to make decisions related to the closing in terms of authorizing resolutions/restrictions/limitations.</td>
</tr>
</tbody>
</table>
| Accreditation and Regulatory Requirements | Accreditation and regulatory issues associated with closing a hospital, include, but are not limited to:  
  • Preparation of the CN  
  • Notification of the State Health Department, NJHCFFA, and JCAHO  
  • Providing required notification of termination for all healthcare licenses (e.g., pharmacy, lab, blood bank, DEA)  
  • Notification of appropriate federal agencies (e.g., Department of Health and Human Services, Social Security Administration, CMS, Internal Revenue Services, Environmental Protection Agency)  
  • Notification of appropriate State agencies (State Department of Licensing and Regulation, Worker’s Compensation, Employment Security Bureau, Planning Commission) |
| Communications with Key Constituencies | Given that hospitals have a multitude of constituencies, communication with these various groups and individuals throughout the closure process is critical. It is essential that the hospital identify the necessary communications resources, assign responsibility for communications, develop a consistent message regarding the reasons for and process of closure and provide ongoing updates and information to groups including, but not limited to those identified below  
  • Board and other governing bodies  
  • Vendors and suppliers  
  • Medical staff  
  • Licensing authorities  
  • Employees  
  • Payers  
  • Patients/families  
  • Donors  
  • Community organizations/neighbors  
  • Volunteers/auxiliary  
  • Elected officials  
  • Lenders/bond trustees  
  • Other providers  
  • Ambulance companies |
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>Employee-related issues that must be addressed in a hospital closure are the following:</td>
</tr>
<tr>
<td></td>
<td>• Notification requirements including provisions in union contracts and the federal government’s Worker Adjustment and Retraining Notification (WARN) Act, which specifies regulations regarding notification of the termination of employment. This act entails notifying both employers and local governments when mass layoffs occur. The specific regulations include provisions regarding the timeframe for notice depending on the size of an organization.</td>
</tr>
<tr>
<td></td>
<td>• Identification and settlement of vacation, termination, sick leave, early retirement, outplacement, life insurance and tuition reimbursement benefits due to employees</td>
</tr>
<tr>
<td></td>
<td>• Determination of prior liabilities related to Worker’s Compensation, EEO, arbitration awards, 401K, etc.</td>
</tr>
<tr>
<td></td>
<td>• Notification for Social Security withdrawal</td>
</tr>
<tr>
<td></td>
<td>• Termination of 401K plan, including notification to employees and payment of match</td>
</tr>
<tr>
<td></td>
<td>• COBRA eligibility information and benefits</td>
</tr>
<tr>
<td></td>
<td>• Identification and negotiation/settlement of special employment contracts</td>
</tr>
<tr>
<td></td>
<td>• Employee reduction plan to coincide with the ramping down/cessation of operations</td>
</tr>
<tr>
<td>Financial</td>
<td>While the cost of closing a hospital will vary from one hospital to another, there are typically a number of obligations that must be met, including:</td>
</tr>
<tr>
<td></td>
<td>• Vendor or trade debt</td>
</tr>
<tr>
<td></td>
<td>• Commercial lease financing</td>
</tr>
<tr>
<td></td>
<td>• Corporate debt</td>
</tr>
<tr>
<td></td>
<td>• Tax exempt bonds or leases</td>
</tr>
<tr>
<td></td>
<td>• Wages, pensions and benefits</td>
</tr>
<tr>
<td></td>
<td>• Malpractice and other insurance</td>
</tr>
<tr>
<td></td>
<td>• Taxes</td>
</tr>
<tr>
<td></td>
<td>In addition to these obligations, it is important to note that equipment leases generally include penalties for early cancellation. If the hospital has land and building leases, these also generally have early cancellation penalties. Likewise, vendor service agreements often have penalties for early cancellation, as do physician contracts.</td>
</tr>
<tr>
<td>Medical Staff</td>
<td>Some of the major medical staff issues resulting from a hospital’s closure include:</td>
</tr>
<tr>
<td></td>
<td>• Determination of assistance to be provided to physicians (e.g., facilitate expedited credentialing at other facilities)</td>
</tr>
<tr>
<td></td>
<td>• Physician contract review, notification and settlement</td>
</tr>
<tr>
<td></td>
<td>• Continuing Medical Education (CME) credit reporting</td>
</tr>
<tr>
<td></td>
<td>• Specialist coverage (e.g., anesthesia, E.R., radiology, pathology, etc.) through transition/closure</td>
</tr>
<tr>
<td></td>
<td>• Medical records completion</td>
</tr>
</tbody>
</table>
Issues to Address in Closing a Hospital

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
</table>
| Legal              | Legal issues surrounding the closure of a hospital permeate virtually all of the considerations in closing a hospital. Other legal considerations associated with the closing of a hospital include:  
- Loan agreements, supply contracts, deeds, contracts and option to purchase land, leases and sub-leases, contracts with related organizations, guarantees, installment sales agreements, third-party managed care organizations, physician groups, HMOs, PPOs  
- Settlement of contracts, including physician contracts, loan agreements, supply contracts, service contracts, deeds, leases (real estate and equipment) guarantees, installment sales agreements, bond documents  
- Litigation and risk exposure, including insurance claims, threatened proceedings, consent decrees, fraud and abuse claims, etc. |
| Patients           | Issues affecting patients and their families relate primarily to redirecting patients to other facilities and providers once the hospital ceases operations. Key patient- and family-related components of a hospital’s closure plans should include, for example:  
- A schedule for patient clinical care wind-down, based on State Department of Health and Senior Services requirements and financial constraints  
- A plan for phase-out of acute care inpatient services, ED operations, ambulatory care services and transfer of remaining patients  
- A patient/family communication plan |
| Operations         | Operational considerations are a key aspect, as the hospital must continue to operate as it goes through the process of ceasing operations. Some of the operational considerations related to closing a hospital include:  
- Security plan for asset preservation  
- Facility upkeep  
- Supply control  
- Handling of confidential material, including retention and retrieval of medical records, pharmacy records, employee records, legal documents, financial records, x-rays, medical staff records, etc. |
| Asset Disposition  | Examples of assets at the hospital that will need to be disposed of when closing include:  
- Real estate – can be sold and the proceeds used to meet some of the hospital’s financial obligations.  
- Owned equipment – can be offered for sale to physicians or other hospitals. Alternatively, the hospital can solicit bids from a firm to purchase the equipment in its entirety.  
- Supplies and drugs – explore the potential for returns to vendors, offer to sell them to other hospitals, clinics, or physicians, and/or arrange for overseas donation of certain items. |
Appendix 8.1: **FINAL SUBCOMMITTEE REPORTS**

**Subcommittee Report 1:**
Access and Equity for the Medically Underserved

**Subcommittee Members**

**Jennifer Velez, J.D. – EX-OFFICIO**
*Subcommittee Co-Chair*
Member, Commission on Rationalizing Health Care Resources
Commissioner, Department of Human Services

**Peter Velez, M.P.H.**
*Subcommittee Co-Chair*
Member, Commission on Rationalizing Health Care Resources
Executive Director, Newark Community Health Centers, Inc.

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Vice President of Behavioral Health & Psychiatry
Trinitas Hospital

**Linda Garibaldi, J.D.**
Member, Commission on Rationalizing Health Care Resources
Senior Attorney, Legal Services of NJ

**JoAnn Pietro, R.N., J.D.**
Member, Commission on Rationalizing Health Care Resources
Partner, Wahrenberger, Pietro and Sherman LLP

**Carolyn Holmes**
Lead Staff to Subcommittee
Senior Advisor to DHSS Commissioner

**Carolyn Beauchamp**
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Mental Health Association of NJ

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Executive Director
Hispanic Family Center of Southern NJ

**Marlene Lao Collins**
Director for Social Concerns
New Jersey Catholic Conference

**Jim Dieterle**
Executive Director
AARP of New Jersey

**Larry Downs, Esq.**
President
Medical Society of NJ

**Charles “Shai” Goldstein**
Executive Director
New Jersey Immigration Policy Network

**Katherine Grant-Davis**
Executive Director
NJ Primary Care Association

**Peter Haytaian**
AmeriGroup Corporation

**Harvey Holzberg**
Chief Executive Officer
Hoboken University Medical Center

**Suzanne Ianni**
President/Chief Executive Officer
Hospital Alliance of NJ

**Phyllis Kinsler**
Executive Director
Planned Parenthood of Central NJ

**Paul R. Langevin**
President
Health Care Association of NJ
Appendix 8.1

I. Subcommittee Charge

The Subcommittee on Access and Equity for the Medically Underserved was charged with developing recommendations to address the breadth of needs of low-income and medically underserved New Jersey residents. More particularly, this subcommittee examined the systemic gaps and other access barriers that now exist, which often interfere with the availability and provision of quality primary, specialty and inpatient care, including inpatient and outpatient mental health and substance abuse care. In the context of the full Commission’s final report, and in the environment of increasing numbers of hospital closures, the Subcommittee’s work focused on identifying potential solutions and alternative approaches to the provision of healthcare.

The gaps and access barriers identified by the Subcommittee included the following: over-reliance and/or inappropriate use of hospital emergency rooms, in the absence of other appropriate venues for the delivery of healthcare services; disparate and/or disconnected local health planning, in connection and in cooperation with community-based partnerships; a dearth of primary and specialty healthcare providers (doctors, nurses, nurse practitioners, physician assistants, dentists and other oral healthcare practitioners) and related workforce availability issues; transportation; cultural and communication barriers, including access for individuals who have mobility impairments, or are deaf, hard of hearing, blind or visually impaired; access issues for persons for whom English is not a primary language; medical and dental care needs for individuals with developmental disabilities; availability of healthcare insurance; and historically low Medicaid reimbursement rates.

II. Overview of Subcommittee Process

The Commission members and State agency staff conducted two planning meetings prior to convening the full subcommittee, in order to identify data that would be helpful to subcommittee members during their deliberations, including maps and charts that identify the location of hospitals, federally qualified health centers, mental health, and other state and federally funded agencies located in medically underserved areas. This data was made available through the New Jersey Department of Human Services.

The Subcommittee held three meetings with the full membership: July 25, August 8, and August 30, 2007. A final meeting with Commission members and State agency staff was then held on September 6, 2007.

During the first full meeting, the Subcommittee was initially divided into subgroups and tasked with answering two fundamental questions:

1. What are the basic and essential health services that should be available for New Jersey residents?

2. Who constitutes the “medically underserved”?
For the purposes of this initial discussion, the subgroups intentionally operated under some very artificial assumptions: that insurance coverage, costs of providing such services, financial viability of neighborhood hospitals, access to transportation, and availability of primary and specialty care were issues of no consequence. Instead, the task was more narrowly focused on the services themselves in order to identify essential core services.

III. General Approach to the Issue

After much discussion regarding services to which New Jersey residents must have access, the Subcommittee decided that basic and essential services could, for the purposes of this report, be defined as those services covered by Medicaid Plan A, with some caveats. These services, while not entirely all encompassing, covered the broadest range of needs, and included specialty care populations such as individuals with developmental disabilities.

The Subcommittee also grappled with defining the medically underserved population. Was one “medically underserved”, for example, if one needed to travel a significant distance in the state for a mammogram? Or for bariatric surgery? After much deliberation, the Subcommittee agreed to use the definition of “Medically Underserved Areas” as used by the U.S. Department of Health and Human Services when it determines areas for funding programs and services for medically underserved populations: [http://bhpr.hrsa.gov/shortage/ muaguide.htm](http://bhpr.hrsa.gov/shortage/muaguide.htm) This geographic narrowing appeared to satisfy concern that a particular healthcare service, while essential to some, may not necessarily be readily available to all New Jersey residents.

As the Subcommittee delved more deeply into its charge, it became apparent that barriers to care can be broadly categorized as either economic or environmental, or both, in nature. Economic barriers included access to health insurance, hospital finances and Medicaid reimbursement rates. Environmental barriers included geographic proximity to some other locus of care as a viable alternative to a hospital emergency room, transportation availability, language and other cultural or communication difficulties, physical access barriers for individuals with mobility impairments, well-established behavior (one may be accustomed to accessing care through a hospital emergency room), and traditional focus on and funding of acute versus preventative care. In addition, three points of agreement emerged as a backdrop against which the group’s work took shape:

(1) Most fundamentally, the relationship between the community and its hospitals was recognized as complex. A lack of services within a community, for example, often results in inappropriate or over-reliance on a given hospital, which strains the hospital’s finances and overall capacity. Conversely, hospital closures frequently strain community services and negatively impact capacity. What would ideally be a symbiotic relationship is often fraught with tension. The proliferation of ambulatory care centers across the state, which are arguably better able than hospitals to control payer mix, additionally strains hospital resources. It should be noted that while the Subcommittee did discuss this issue, it will be explored at greater length in the Commission’s full report.

(2) Recognition was paid to the fact that health disparities associated with income, race, ethnicity and disability are closely intertwined with the issue of health access and quality. Indeed, barriers to accessing quality health care are at a least a contributing factor to the grim reality that death rates from heart disease are more than 40 percent higher for African Americans than for whites and that Hispanics are nearly twice as likely as non-Hispanic whites to die from complications of diabetes.

(3) Last, but certainly not least, there was an acknowledgment that one of the most significant predictors of access to health services and treatment is health insurance coverage. As the solutions to this factor are entangled with political, financial and philosophical differences, and therefore exceedingly complex, the Subcommittee did not devote any time to solutions concerning this topic.

IV. Key Findings and Recommendations

A. There is an over-reliance and/or inappropriate utilization of hospital emergency rooms

Hospitals are in trouble, at least in part, because they are inappropriately serving patients. Hospitals in low-income areas all too often report a large volume of cases
that come to their emergency departments with late stage illnesses such as cancer and kidney failure or come repeatedly for chronic conditions such as asthma, diabetes, and congestive heart failure. Indeed, a September 2007 Rutgers Center for State Health Policy report (Rutgers Study) noted that emergency department visits are on the rise in New Jersey and that a significant percentage of the visits might have been avoided through better access to primary care.

**Recommendation:**

Successful patient case management models should be supported and replicated in order to address the large volume of ambulatory care sensitive utilization. For example, certain case study hospitals included in the September 2007 Rutgers Study have developed “fast track” systems to separate emergent from other cases in the emergency department. Under this model, patients are routinely referred to outpatient clinics for non-emergent care. Other hospitals are having success as a result of developing elaborate case management and chronic disease management systems within the emergency department itself. While this is a clear departure from the traditional role of the emergency department, these facilities have decided that community need and patient preference have made the departure necessary. (This report can be accessed in full at: http://www.cshp.rutgers.edu/Downloads/7510.pdf).

Additionally, New Jersey should seek to replicate and implement emergency room (ER) diversion programs. Under such programs, hospitals employ a nurse to care manage patients after their ER visit. For Medicaid clients enrolled in an HMO, after the ER visit, the care manager works with the patient and the HMO in order to ensure that the proper follow-up care is coordinated with the patient’s medical home and primary care physician. In cases of Medicaid fee-for-service, the care manager connects the patient with the FQHC, as it will become the patient’s medical home. The purpose is to provide primary care as part of the continuum of care needed to prevent increased acute episodes.

**B. Local health planning is disparate and/or disconnected from community-based partnerships**

**B1. FQHC/Community-Based Clinic Issues**

Through a network of ninety-six satellite sites located statewide, New Jersey’s nineteen Federally Qualified Health Centers (FQHCs) provide high quality preventive, primary, and acute care medical services for its medically underserved population. In addition, community-based health centers, such as Volunteers in Medicine, family planning centers, and the like provide similarly necessary services.

While the FQHCs and community health clinics are models for providing high quality primary and preventive care services, most of these sites are not equipped to provide specialty care services for a wide range of specialty care needs of their patient population. At present, for example, most FQHCs provide specialty care services through referrals to specialists affiliated with local hospitals or specialty care clinics as needed. Only a handful of these health centers have on-site specialty care services for selected specialties.

Since many of the medically underserved areas also suffer from severe shortages in health care providers, in many instances, the current referral system fails to provide timely treatment for the health center patients often resulting in harmful health effects, high number of emergency department visits, and costly hospitalizations. (For a fuller discussion of recommendations related to the FQHCs’ role in New Jersey, go to: http://www.njpca.org/Medical%20Home%20Document.pdf). It should be noted that support for Federal legislation increasing the number of FQHCs across the country would provide meaningful impact on the medically underserved community.

**Recommendation:**

Increase the primary care infrastructure and supply of specialty care to patients served by FQHCs and community-based clinics.

It is important to note that the Subcommittee generally agreed that community-based health clinics and FQHCs were equally critical to providing primary and specialty care. One solution proffered to accomplish the above recommendation was to encourage the New Jersey Primary Care Association (NJPCA), in collaboration with the Medical Society of New Jersey (MSNJ) and New Jersey Hospital Association (NJHA), to work to establish an expanded network of specialty care providers and hospitals to provide additional specialty care support for the health centers. By negotiating letters of agreement with specialists and participating specialty care clinics and hospitals, health centers could refer their patients as needed.
A related solution would encourage FQHCs and other clinics to focus primarily on providing on-site specialty care. The NJPCA has identified three approaches to providing on-site specialty care. Since case overload is a major reason for backlog in the existing system of specialty networks, the first approach would be to recruit retired specialists to provide volunteer specialty care services on-site at the health centers.

Costs associated with this approach include the cost of maintaining a valid license for retired physicians, the cost of registration for Continuing Medical Education (CME) credits and the cost of malpractice liability coverage for retired specialists. Legislative support at the national level is also needed to extend medical malpractice liability protections to volunteer physicians at community health centers. (H.R. 1313, the “Community Health Center Volunteer Physician Protection Act of 2005” was introduced in November 2005 to amend the existing Public Health Service Act to provide liability protections for volunteer practitioners at health centers.) A New Jersey alternative to this Federal legislation was introduced in 2003. While these bills would act as a catalyst to help bolster the infrastructure of physicians who volunteer service, both have been stalled in the process.

A second option would be to hire retired specialty care physicians on a part-time basis at the health care centers. Once employed, these physicians would be eligible for malpractice coverage under the Federal Tort Claims Act of 1992.

Under a third approach, health centers would contract with practicing specialists to provide on-site services for a few hours each week in high priority specialty areas. A related recommendation in this area was to encourage FQHC and community clinic physicians to join the medical staff of a single local hospital in order to encourage patient care through a team approach.

**B2. Mental Health and Substance Abuse Services**

Local hospitals are an integral part of the community mental health and substance abuse systems with much of the emphasis on meeting the most acute, serious needs of these populations. Many hospitals offer a continuum of psychiatric and substance abuse services, which function as acute care diversion services, as well as step down options from more intensive services. As they are embedded in the community, these hospitals are critical in responding to the needs of the community members. When hospitals close, it is imperative that these critical services remain available to the community at the same level of accessibility and clinical intensity.

While hospitals serve as an important part of the mental health and substance abuse treatment system, some patients seeking emergency room treatment present signs of mental health or substance abuse treatment needs. According to the 2007 Rutgers Study, New Jersey hospitals have increasingly become providers of care for mental health and substance abuse patients, particularly through the emergency department. A number of emergency department physicians have attributed this rise to a decrease in the number of psychiatric beds and detoxification services and insufficient funding for community-based mental health and substance abuse care. Many admissions to emergency rooms are often related to drug or alcohol misuse. Best practice indicates that substance abuse-related emergency room visits represent an opportune moment for screening, brief intervention, and referral to treatment services. Currently, this practice is not widely implemented.

Additionally, the Subcommittee noted that the continuum of preventative, non-acute care provided by community-based and hospital providers is less expensive, effective, and preferable to costly emergency-based care. Available services and funding sources from hospital closures could be transitioned to replacement community or hospital-based services, and when possible, to more wellness and recovery-oriented services.

**Recommendation:**

State health policy should expand mental health and substance abuse capacity in the community, prioritize funding for mental health and substance abuse services, and insist on tailoring services to patients’ wellness and recovery needs. In addition, it is also critical that acute psychiatric and detoxification services, emergency and acute hospital inpatient care continue to be available in a hospital setting. As noted above, this could be funded through a reallocation of resources available once a hospital closes. Similar resource shifts should likewise occur for substance abuse services, now available on an inpatient basis in only limited parts of the State.
B3. Disconnect between community needs and the Certificate of Need process

The Subcommittee noted that the existing Certificate of Need (CN) process, which, in relevant part, examines availability and continuity of community resources when a hospital is considering closure, is ripe for examination and can be strengthened.

Recommendation:

Institute a community-based health planning process that encourages partnerships and includes community resources so that access to basic and essential healthcare services is a proactive, rather than a reactive endeavor. To that end, the Subcommittee is recommending that four regional focus groups be convened over the next year to ensure that input into health system redesign is focused on a consumer-driven system of care. If a hospital must ultimately close, county-based planning can buttress the Department of Health and Senior Services’ monitoring of the availability of sustained, alternate resource development.

C. There exists a dearth of primary and specialty healthcare providers (doctors, nurses, nurse practitioners, physician assistants, dentists and other oral healthcare practitioners) and related workforce availability issues.

C1. Historically low Medicaid reimbursement rates

New Jersey’s historically low provider reimbursement rates for Medicaid are well documented, and have been directly associated with adversely impacting access to a variety of healthcare services. Indeed, the abysmally low reimbursement rates have so severely impacted the availability of healthcare professionals who are willing and/or financially able to offer services to Medicaid patients in some cases, that meaningful access can be compromised by any reasonable level of geographic proximity to clients for care or may result in wholly inaccurate listings of practitioners willing to participate in such care.

Recommendation:

To improve the availability of quality care, the Subcommittee recommended that New Jersey should set provider reimbursement rates for Medicaid and other state-funded health care services at 75% or more of current Medicare reimbursement rates. The Subcommittee did note that Governor Corzine’s 2008 Budget Initiative to include $5 million (a $20 million figure once annualized and matched with federal dollars) to increase Medicaid rates for services to children was a first and meaningful step to address this long-standing concern.

C2. Workforce issues and Graduate Medical and Dental Education

According to the New Jersey Council of Teaching Hospitals, New Jersey’s teaching hospitals provide 70 percent of the medical care to the uninsured and underinsured. Faculty medical staff and physician residents are key care providers to New Jersey’s medically underserved. New Jersey ranks 18th in the nation as to the number of physicians in training relative to the State’s population. Furthermore, New Jersey has a particularly high percentage (39.7%) of practicing physicians who are International Medical Graduates (IMG), ranking us 2nd in the nation.

According to the Medical Society of New Jersey, our State is currently experiencing a shortage of physicians in the fields of obstetrics and gynecology, pediatric subspecialties, neurosurgery, anesthesiology, family practice, and general surgery. There is a similar shortage of dentists and other oral health practitioners. A September 2000 GAO report, “Factors Contributing to Low Use of Dental Services by Low-Income Populations” (http://www.gao.gov/archive/2000/he00149.pdf), discusses not only the low Medicaid reimbursement rates for dentists but also the short supply of dentists in many areas.

Recommendations:

• Loan forgiveness and scholarships. New Jersey should provide loan forgiveness and scholarships for professionals willing to serve in medically underserved areas or in professional specialties experiencing workforce shortages. Targeting incen-
Access and Equity for the Medically Underserved

D. Lack of practical transportation options hinders access to care.

For those individuals who are not Medicaid eligible, transportation was noted as a significant barrier to accessing healthcare – especially in rural communities and other areas where a robust transportation infrastructure for seniors and those with disabilities is unavailable. In addition, the lack of coordination among existing systems that serve special populations creates duplication and increased costs.

Recommendation:

- The Subcommittee noted that transportation needs are best resolved through local planning and should figure prominently in the community and regional planning noted above. The federal government has initiated a "United We Ride" initiative that requires states to enhance access to transportation to improve mobility, employment opportunities, and access to community services for persons who are transportation-disadvantaged, including seniors, individuals with disabilities, and low income households. (New Jersey’s Department of Human Services manages this initiative.)

- When available, transportation for persons who are Medicaid eligible may be coordinated with existing county Paratransit trips. This will increase cost efficiency and reduce duplication of trips routing.

- The federal regulations that govern the United We Ride initiative require that each state develop a local planning process whereby the needs of the target populations are examined and addressed. Localities who fail to develop transportation plans risk losing Federal Transportation Administration (FTA) funding.

- The United We Ride initiative offers the health care community an opportunity to incorporate the transportation needs of the medically underserved into the local planning process. Since the planning process in ongoing, the health care community should verify that a member from their community is participating on the local transportation steering committee. This will ensure that, as transportation needs of the population change, they are identified on the plan updates.
E. Cultural and communication barriers exist for a number of special needs populations, including access for individuals with disabilities, including persons who are deaf, hard of hearing, blind, or visually impaired, or those for whom English is not a primary language.

E1. Special Needs Populations

E1a. Individuals who are Deaf or Hard of Hearing:

Generally speaking, the healthcare access needs for this population are similarly affected by the access and equity issues noted above. One obvious complication, however, is the ability of healthcare professionals to meaningfully communicate with persons who are deaf or hard of hearing, so that the quality of care rendered is not compromised. A 2005 study published in the Journal of General Internal Medicine examined healthcare system accessibility issues of deaf people found communication to be pervasive healthcare access problem. This report can be found at: http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1828091

Technological advancements are increasingly available, as are traditional resources such as American Sign Language interpreters, although in diminishing supply. These resources can readily provide meaningful communication for those with special needs, as appropriate. Access remains largely dependent, however, upon a healthcare facility’s investment in and commitment to ensuring adequate availability of human or technological resources for those who require such assistance.

E1b. Individuals who are Blind or Visually Impaired:

Sensitivity and transportation issues permeate the access and equity issues for blind and visually impaired individuals. The ability to access health care is often dependent on the ability to complete health forms. Lack of alternative media for medical forms and the availability of staff to read forms creates a major barrier for sight impaired individuals. A 2007 study conducted by the National Council on Disability points to the importance of providing health care forms and information in alternative formats for those with visual impairments. As with other populations, accessing barrier free transportation is also an important issue. A full copy of the National Council on Disability report can be found at: http://www.ncd.gov/newsroom/publications/2007/implementation_07-26-07.htm

E1c. Individuals with Physical Disabilities:

Generally speaking, the healthcare needs of individuals with physical disabilities are similarly affected by the access and equity issues noted above. Two complications, however, are barrier-free access to the locus of care and meaningful access to transportation. The above mentioned National Council on Disability report identified access to transportation as a significant barrier to accessing healthcare. One example of an important healthcare issue for this population is the lack of availability of accessible examination tables for persons who are non-ambulatory.

E1d. Individuals with Developmental Disabilities:

The medical needs of individuals with developmental disabilities range enormously in their complexity. A 2002 publication by the Surgeon General titled “Closing the Gap: A National Blueprint to Improve the Health of Persons with Disabilities” (http://www.surgeongeneral.gov/topics/mentalretardation/retardation.pdf) underscores the challenges in obtaining these services.

For those whose disability is mild to moderate, access to traditional hospital venues and/or community care clinics may suffice for routine medical or dental needs. For those with significant developmental disabilities, however, access to specialty medical and dental care, as well as mental health care (if needed) is critical. Additional behavioral supports may be required for consumers with challenging behaviors in order to facilitate the exam and treatment provided by the physician or dentist. A 2005 report by the Special Olympics highlights the gaps in health care for those with developmental disabilities. This report can be accessed via the Special Olympics website, www.specialolympics.org, and visiting their research link. The issue of transportation, akin to that which was noted for individuals with physical disabilities, is also a barrier to accessing health care services. The Subcommittee also noted that the recently-enacted Danielle’s Law has imposed some unintended stressors upon hospital emergency rooms, as the frequency of such visits has increased.
Recommendations:

While it is difficult to generalize the accessibility concerns of special needs populations, basic accommodations such as communication support, barrier-free access, and specialized care are not always costly and should be prioritized. One example of an important and low-cost effort towards effective communication is the Communication Picture Board, prepared through a collaboration of the New Jersey Department of Health and Senior Services/Office of Minority and Multicultural Health and the New Jersey Hospital Association. This board utilizes a variety of pictures to enhance one’s expression of needs, and is designed for use by emergency service personnel and frontline intake staff to better enable effective communication with the public.

For individuals with developmental disabilities, the dearth of medical and dental specialists is particularly acute. Articles at http://rtc.umn.edu/nhis/ and http://www.pubmedcentral.nih.gov/picrender.fcgi?tool=pmcentrez&artid=1783697&blobtype=pdf cite accessibility and communication as barriers to medical and dental services. As such, the establishment of Centers of Excellence for medical, mental health and dental care for individuals with developmental disabilities should be explored. Finally, the recruitment and retention issues noted above for medical and dental professionals exist as well for those individuals with developmental disabilities.

E2. Language

The increase in immigrant groups in New Jersey, coupled with higher incidence of chronic health care conditions requiring regular health care monitoring, argues strongly for health care services that can adequately serve linguistically, ethnically and culturally diverse families.

Recommendation:

To provide better access to healthcare and prevent unnecessary complications due to language and cultural barriers, New Jersey should provide translation and outreach and educational materials in the language of the patient populations. This can best be achieved by local planning efforts, outlined above.
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.

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.

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.
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>Perfect Care Scores: AMI, pneumonia, CHF, SCIP</td>
<td>Yes</td>
<td>DHSS based on information collected for Hospital Performance Report</td>
</tr>
<tr>
<td>Nosocomial Infection Rates</td>
<td>Yes in 2009</td>
<td>DHSS will phase-in based on hospital reports</td>
</tr>
<tr>
<td>Hospital CAHPS</td>
<td>Yes in 2008</td>
<td>CMS</td>
</tr>
<tr>
<td>Mortality-Risk Adjusted for top 10 DRGs</td>
<td>Yes</td>
<td>DHSS based on APR-DRGs</td>
</tr>
<tr>
<td>AHRQ IQI Mortality:</td>
<td>Yes</td>
<td>DHSS calculates using AHRQ software and APR-DRGs</td>
</tr>
<tr>
<td>• Pneumonia</td>
<td></td>
<td></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>30 day Readmission Rates for top 10 DRGs</td>
<td>Yes</td>
<td>DHSS based on APR-DRGs</td>
</tr>
<tr>
<td>ALOS-Risk Adjusted for top 10 DRGs</td>
<td>Yes</td>
<td>DHSS based on APR-DRGs</td>
</tr>
<tr>
<td>Accreditation Status</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

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Health Care Consultant
Commission Member

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Jersey City Medical Center

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Appendix 8.3: FINAL SUBCOMMITTEE REPORTS

Subcommittee Report 3:
Infrastructure of Healthcare Delivery

Subcommittee Charge:
To explore the reasons for the lack of adequate information systems in health care, sketch the vision of a 21st century health-care information system, examine how much of that vision has been achieved by now in New Jersey or is actively being pursued, and finally offer recommendations to move New Jersey health care toward an information platform that adequately serves the state’s people.

Overview
The Subcommittee was formed in May 2007 and was composed of 12 members which are listed below.

Membership

Uwe Reinhardt, Ph.D., Chairman
Subcommittee Co-Chair
Chairman, Commission on Rationalizing Health Care Resources
The James Madison Professor of Political Economy
The Woodrow Wilson School of Public & International Affairs, Princeton University

Annette Catino, Subcommittee Co-Chair
President & Chief Executive Officer
QualCare, Inc.

Matthew D’Oria
Lead Staff to Subcommittee
DHSS Deputy Commissioner

Bruce Vladeck, Ph.D.
Member, Commission on Rationalizing Health Care Resources

Mark Barnard
Senior Vice President of Information Technology
Horizon Blue Cross/Blue Shield of New Jersey

Sonia Delgado
Princeton Public Affairs Group, Inc.

Richard Goldstein, M.D.
President
NJ Council of Teaching Hospitals

Vincent Joseph
Senior Vice President
University Medical Center at Princeton

Michael Maron
President/Chief Executive Officer
Holy Name Hospital

Mitchell Rubin, M.D.
Neurology Consultants of BC

Kevin Slavin
President/Chief Executive Officer
East Orange General Hospital

Joseph Sullivan
Chief Information Officer
St. Barnabas Health Care System
An Information Infrastructure for New Jersey Health Care

It is fair to state that health care in New Jersey, in the United States and virtually everywhere in the world is rendered in a fog. People in that fog may be trying to do the best they believe can be done, but collectively they fall far short of the best that would be achievable with a lifting of that fog.

The fog in question is the lack of pertinent information that can, at once, guide decision making in health care and hold the participants in the health care sector accountable for their actions. It is also fair to state that, relative to other sectors in modern economies – e.g., the financial sector, the travel industry, and the retail industry, to mention but a few -- the health sector tends to be a unique underachiever in this regard. It devotes relatively fewer resources to information systems than do other industries and, for the resources it does deploy, achieves less. Much of the waste, fraud and abuse said to be part of modern health systems and considerable human suffering – in the midst of much succor and miraculous cures -- can be traced to this lack of an adequate information system.

The persistent fog surrounding the delivery of health care is particularly disturbing in the face of current attempts to convert what hitherto had been known as “patients” into “consumers” who are expected to shop around smartly for cost-effective care under so-called Consumer Directed Health Care. Unless strident efforts are made at last to lift that fog through more widespread application of modern information technology (IT) in health care, these “consumers” will resemble nothing so much as blindfolded shoppers thrust into department stores, there to shop smartly for wanted or needed items.

The IT subcommittee report explores the reasons for the lack of adequate information systems in health care, sketches the vision of a 21st century health-care information system, examines how much of that vision has been achieved by now in New Jersey or is actively being pursued, and finally offers some recommendation to move New Jersey health care toward an information platform that adequately serves the state’s people.

The Imperative of a Health System Information Infrastructure

At the core of an efficiently functioning health-care system is an information infrastructure that enables the various decision makers in health care -- patients, physicians and nurses, the executives of health care facilities, insurance companies and government officials -- to make decisions that result in timely and cost-effective health care. Remarkably, relative to other sectors in the economy, the health sector has been uniquely lagging in its use of available IT. In exploring the reasons why this is so, it will be helpful to divide the sector into its supply side and its demand side.

The Supply Side: As a general rule, suppliers in any economic sector will actively seek the information that helps them achieve their own goals, but otherwise will shun the transparency that might expose them to the brunt of full-fledged competition on price and quality as well as public accountability for the use they make of resources.

That penchant is not evil. It is normal and perfectly human. Therefore, the supply side in health care cannot be expected to develop the information infrastructure required for cost-effective, high-quality health care unless it is mandated to do so by those who pay for health care. Here it must be noted that the users of health care (patients) and those who pay for health care (government and private insurers) so far have been remarkably tolerant of a high variance in both the cost and quality of the health care they procure, where “high variance” is technical jargon for the phenomenon that excellent and shoddy quality and wasteful as well as cost-effective health care are permitted to exist side by side within the same health-care system – e.g., that of a single state or even a single community. Instead, the payers have simply trusted the providers of health care to do the right thing.

The Demand Side: One can understand why patients, who usually are well-insured from the cost of health care, would not show much concern over the total cost of their care, as long as their out-of-pocket costs are tolerable. The patients’ manifest indifference toward variations in the quality in health care, however, is nothing short of remarkable. The only sensible
explanation is that so far patients have been kept ignorant of that variance, which has long been known to health policy analysts and at least some policy makers in the private and public sectors. Why both public and private insurers have been so passive on this score remains a mystery.

**High Variance in the Quality and Cost of Health Care**

In the mid-1990s, for example, benefit managers at the General Electric Co. popularized the six-sigma chart shown below, indicating for a number of activities the number of defects per million opportunity for defect (DPMO), a metric used in six-sigma quality control. The chart indicated that more errors occurred in a number of medical treatments than in baggage handling by airlines, a notoriously error-prone activity. It is a quite stunning statement on the quality of U.S. health care, especially because Americans so often boast that theirs is “the best health system in the world.

**Figure 1:**
The Quality Imperative: The General Electric View
At the end of the decade, in 1999, the prestigious Institute of Medicine (IOM) of the National Academy of Sciences published its landmark study To Err Is Human: Building a Safer Health System, in which the Institute’s panel of experts estimated that somewhere between 44,000 to 98,000 Americans died prematurely in hospitals as a result of avoidable medical errors, very frequently errors in the administration of drugs. Earlier in the decade, Lucien L. Leape, M.D. of Harvard University had likened these premature deaths due to medical errors in a seminal article published in the Journal of the American Medical Association as “the equivalent of three jumbo-jet crashes every 2 days.”1

The IOM’s 1995 report was followed, in 2001, by the Institute’s Crossing the Quality Chasm: A New Health System for the 21st Century. A passage in the Executive Summary is instructive for present purposes:

The health care system as currently structured does not, as a whole, make the best use of its resources. … A highly fragmented delivery system that largely lacks even rudimentary clinical information capabilities results in poorly designed care processes characterized by unnecessary duplication of services and long waiting times and delays. And there is substantial evidence documenting overuse of many services – services for which the potential risk of harm outweighs the potential benefits. What is perhaps most disturbing is the absence of any real progress toward restructuring health care systems to address both quality and cost concerns, or toward applying information technology to improve administrative and clinical processes (p. 3; Italics added).

Apparently, there has not been much progress since 2001 either. In a paper entitled “The End of the Beginning: Patient Safety Five Years After ‘To Err is Human’,” Robert Wachter observes that

Since 1999, there has been progress, but it has been insufficient. Stronger regulation has helped, as have some improvements in information technology and in workforce organizations and training. Error-reporting systems have had little impact, and scant progress has been made in improving accountability. Five years after the report’s publication, we appear to be at “the end of the beginning.”2

Shown on the next page are data on clinical outcomes from three standard procedures in tertiary centers, broken down into those declared by the Blue Cross Blue Shield Association to be Centers of Distinction and all other centers in the study. The data exhibit a remarkable variance in clinical outcomes, especially in the mortality rate associated with heart transplantation. These data raise two questions. First, what factors drive this high variance in clinical outcomes. Second, why do patients continue to be referred to centers with high mortality rates, and why do private insurers pay for procedures performed in such centers?

Ignorance of these facts is likely to be the major explanation. While targeted studies can identify such variances, such data are not routinely collected, organized and publicized. Government’s casual attitude towards these variances in mortality in the hospital sector stands in stark contrast to the stringent patient-safety standards government imposes on the pharmaceutical and medical device industries. Why should an avoidable, premature death in a hospital be taken more lightly than a death from a problematic prescription drug or medical device? The subcommittee makes note that New Jersey’s various health report cards indicate significant and steady improvements in the quality of care at the State’s hospitals. This evidence further confirms that the availability and transparency of health care data improves quality.

Finally, results from a recently published study in *The New England Journal of Medicine* suggest that, on average, children in the study received 46.5% of the indicated care, a finding that parallels an earlier, similar study for adults published in the same journal. In sum, then, uneven quality of health care remains a significant feature of the American health care system, and New Jersey’s health system, while improving, is not an exception to this finding. It would be puzzling indeed why patients accept this state of affairs with such equanimity – why they would opt to receive care at hospitals in which their chance of dying from low-quality care is higher than elsewhere – were it not for the fact that patients have absolutely no idea that such quality differentials exist. Instead of transparency on so important a matter, patients have been lulled into complacency by the much-mouthed mantra that the American health system is the best in the world, a mantra actually contradicted by a growing body of evidence. As a recent cross-national study by the Commonwealth Fund concludes:

Despite having the most costly health system in the world, the United States consistently underperforms on most dimensions of performance, relative to other countries. This report—an update to two earlier editions—includes data from surveys of patients, as well as

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Table 1: Blue Cross Blue Shield Outcomes Study for Tertiary Centers

<table>
<thead>
<tr>
<th></th>
<th>Blue Distinction Centers</th>
<th>All Other Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Maximum</td>
</tr>
<tr>
<td>Short-term Major Complications from Bariatric Surgery</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Heart Transplant Patient One-Year Mortality Rate</td>
<td>11%</td>
<td>30%</td>
</tr>
<tr>
<td>Inpatient Mortality (Heart Attack)</td>
<td>7%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: Data provided by Nat Kongtahworn, Director, Network Strategies, Office of Clinical Affairs, Blue Cross Blue Shield Association.

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4 Steven M. Asch, M.D., M.P.H., Eve A. Kerr, M.D., M.P.H., Joan Keesey, B.A., John L. Adams, Ph.D., Claude M. Setodji, Ph.D., Shaista Malik, M.D., M.P.H., and Elizabeth A. McGlynn, Ph.D.
information from primary care physicians about their medical practices and views of their countries’ health systems. Compared with five other nations—Australia, Canada, Germany, New Zealand, the United Kingdom—the U.S. health care system ranks last or next-to-last on five dimensions of a high performance health system: quality, access, efficiency, equity, and healthy lives. The U.S. is the only country in the study without universal health insurance coverage, partly accounting for its poor performance on access, equity, and health outcomes. The inclusion of physician survey data also shows the U.S. lagging in adoption of information technology and use of nurses to improve care coordination for the chronically ill.5

Information on the Cost of Hospital Care

In the context of health care the word “cost” has two meanings. It could mean the payment the patient’s insurer makes for a hospital service. A better term for it would be the “price” the insurer pays for the service. Or it could mean the cost the hospital (or doctor) incurs to deliver the treatment, that is, the cash providers pay for the inputs they use in the treatment of patients. Not much is known publicly about the payments hospitals receive from different payers for the same service. Almost nothing is known about the input costs different hospitals incur for different services or medical cases.

Payments to Hospitals: The price hospitals receive from insurers for a standard service varies significantly from private insurer to insurer, usually in inverse proportion to the insurer’s market power. That price is different again for Medicaid and different once again for Medicare. Finally, because they have virtually no market power vis a vis hospitals uninsured patients tend to be charged the highest prices, unless they are outright charity cases. In the end, however, what low-income uninsured and non-charity patients actually pay hospitals tends to be just a fraction of the prices they were charged.

All of these varied prices for the same service have virtually no systematic relationship with the cost of providing these services, whatever they may be. Furthermore, with the exception of prices paid by Medicare and Medicaid, all prices paid hospitals from the various parties are kept a tightly guarded trade secret. Although, in principle, uninsured patients or those with high deductible health insurance ought to have information on the prices hospitals might charge them, as a rule there does not exist an information base to provide that information.

There is also a great variation in the volume of services for which New Jersey hospitals bill insurers for roughly similar patients. As Table 2 indicates, during the period 1999-2003, per Medicare beneficiary in the last two years of life, the number of hospital days, Medicare payments per day and Medicare payments for the entire two years varied by a factor of more than 3 across hospitals in New Jersey. The CMS Technical Quality Score appears to be completely unrelated to these resource costs.

Although the medical cases represented by these patients were not 100% identical, so that differences in patients might explain some of this variation, it is hard to believe that genuine differences in acuity could have accounted for such vast differences in health-care utilization. A more plausible explanation is that these differences reflect largely differences in the affiliated physicians’ preferred practice style. That style may be preferred for purely professional reasons, or for economic reasons, or both.

Unfortunately, under our system of physician-hospital affiliation, physicians have great leeway in this regard and can literally conscript the hospital’s resources at will, and cause the hospital to bear costs, without being properly accountable to anyone for their use of society’s health care resources or at personal risk for causing these expenses.

Technology exists that allows hospital executives to track every order entry by every affiliated physician for every input used in the treatment of every hospital case. To be sure, the administrators of some hospitals may routinely assemble resource-use data by individual physician affiliated with the hospital, but such data are unlikely to provide adequate leverage in dealing with physicians on whose goodwill and referrals the hospital must rely for its revenue flow. After all, it is not usually the hospital patient but the referring physician who effectively is the hospital’s customer. The question the Governor and State legislators must explore whether than information should also be available to them to assess the efficiency with which a hospital is run before deciding whether or not a hospital warrants state subsidies of any sort.

The Input-Cost of Hospital Services: The hospital industry regularly laments that Medicare and Medicaid pay hospitals less than 100% of the full cost of treating Medicare and Medicaid patients in hospitals. It is a plausible argument, but it leaves open the question whether the “costs” to which the payers’ payment rates are compared are invariably justified. To say that Medicaid pays only about 70% of a hospitals cost be misleading if the hospital’s cost are 120% of a reasonable benchmark of what efficiently produced health care in hospitals should cost.

### Table 2:
Medicare Payments for Inpatient Care During the Last Two Years of Life of Medicare Beneficiaries (Ratio of New Jersey Hospital’s Data to Comparable U.S. Average, 1999-2003)

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Inpatient Reimbursements</th>
<th>Hospital Days</th>
<th>Reimbursements per Day</th>
<th>CMS Technical Quality Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Michaels Medical Center</td>
<td>3.21</td>
<td>2.34</td>
<td>1.37</td>
<td>0.91</td>
</tr>
<tr>
<td>Kimball Medical Center</td>
<td>2.32</td>
<td>1.26</td>
<td>1.83</td>
<td>0.95</td>
</tr>
<tr>
<td>Raritan Bay Medical Center</td>
<td>1.86</td>
<td>1.85</td>
<td>1.01</td>
<td>0.81</td>
</tr>
<tr>
<td>Christ Hospital</td>
<td>1.83</td>
<td>1.83</td>
<td>1</td>
<td>0.59</td>
</tr>
<tr>
<td>St. Mary’s Hospital Hoboken</td>
<td>1.75</td>
<td>1.72</td>
<td>1.02</td>
<td>0.74</td>
</tr>
<tr>
<td>Beth Israel Hospital</td>
<td>1.58</td>
<td>1.86</td>
<td>0.85</td>
<td>0.83</td>
</tr>
<tr>
<td>Overlook Hospital</td>
<td>1.27</td>
<td>1.36</td>
<td>0.94</td>
<td>0.90</td>
</tr>
<tr>
<td>Medical Center at Princeton</td>
<td>1.17</td>
<td>1.26</td>
<td>0.93</td>
<td>0.94</td>
</tr>
<tr>
<td>Atlantic Medical Center</td>
<td>1.11</td>
<td>1.12</td>
<td>0.97</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Source: Data supplied to the Commission by John H. Wennberg, M.D., Director of the Dartmouth Atlas Project, December 2006.
Here, too, New Jersey lacks a sophisticated information system that can routinely inform government on how a particular hospital’s cost compares to reasonable benchmark costs.

**The Potential Role of State Government in Health Information Systems**

The troublesome circumstances described in the preceding subsections lead to the question what role State government has in financing and constructing an information infrastructure designed to drive the entire health system – patients, insurers and providers alike -- towards higher levels of performance. Alternatively put, the question is whether Americans can rely on the private sector to develop that infrastructure, given that sector’s undistinguished history in this regard.

So far, neither the federal nor the state governments have done much to force greater transparency on the activities of the providers of health care whose revenues depend heavily on government financing. Only in the past few years have governments begun to address this important task seriously. Although private employers and their agents (private health insurers) equally had every opportunity in the past several decades to hold the providers of health care more rigorously accountable for the cost and quality of the services paid for by private insurers, and to provide the insured public with greater transparency on the cost and quality of health care delivered by health care providers, for the most part they, too, have failed to do so and are only now making timid steps in that direction.

If the state’s government wishes to drive the state’s health system more rapidly towards high performance, in terms of both cost and quality, government probably will have to intervene rather heavily to guide the invisible and timid hand of the private market place. To illustrate, a good faith cooperative effort is currently under way by Horizon Blue Cross Blue Shield of New Jersey and the New Jersey Hospital Association to develop a so-called regional health information organization (RHIO) that would facilitate the sharing of clinical information on patients across providers. Participation in any such effort, however, would be voluntary and thereby makes it difficult to develop a business model for the system from the individual hospital’s perspective.

A strong business case for such an infrastructure could be provided if government mandated participation in the RHIO which, in turn, probably would require sustained financial support of the venture by government. That support could easily be defended on economic grounds, as a RHIO has a strong dimension of a public good. Economists make the case that, left to its own devices, the private sector will always under-supply public goods, unless their production is subsidized explicitly by government.

**A Full-Fledged 21st Century Health Information System**

A full-fledged, state-of-the art health-care information system already being developed in several parts of this country and, sometimes even more rapidly, in other nations would serve the following distinct objectives.

1. It would allow physicians and other providers of care throughout the state carefully authorized access to each patient’s complete medical record.
2. It would endow patients with a personal electronic health record that would help them better to manage their health and their use of health care.
3. It would offer the providers of health care and those who pay for it (mainly third-party payers) adequate information to facilitate the business transactions surrounding health care more smoothly and more cost-effectively than is now the case.
4. It would routinely provide data required especially by government (which pays for close to 50% of all health care in the U.S.) and communities to hold the providers of health care accountable for their use of real health care resources in the treatment of patients.
5. In particular, it would yield the data to hold physicians routinely accountable for their use of their own and their affiliated hospital’s real resources in the treatment of patients. Thus one could explore, for example, the huge variations in resource-use exhibited in Table 2 above and hold the individual physicians driving these variances formally accountable for them.

**Different Records in a Health Information System**

It would not make sense to develop one giant electronic record that could serve all of these diverse objectives at once. Instead, there should be a common master file –
Infrastructure of Healthcare Delivery

sometimes called the “spine” – that would contain data used in raw form or transformed by several or all of a set of electronic records customized and enriched with yet other data to serve the narrower objectives listed above. These various electronic records may be described as follows.

**Electronic Health Record (EHR):** An electronic record is any combination of text, graphics, data, audio, pictorial, or other information representation in digital form that is created, modified, maintained, archived, retrieved, or distributed by a computer system. An EHR is a larger concept in that the electronic information is more than the clinical information; it includes demographic information and sometimes payment codes, such as IDC and CPT codes. The electronic information may be shared within a larger organization or with a second outside health care entity and follows federally recognized standards such as HL7 and X12. EHR can and should be certified by the CCHIT. The master “spine” might consists of such EHRs.

**Electronic Medical Record (EMR):** The purpose of the EMR is designed to be an electronic interface among clinicians. It would allow any physician authorized to do so by the patient or the patient’s guardian to access that patient’s full medical record, or authorized parts of it, which would include a medical history, the patient’s current drug regimen, all tests previously done and observations recorded by other physicians. The EMR would be kept in the clinical language understood by clinicians. This objective could be accomplished either by a smart card carried by the patient or by what is known as the VISA system, that is, a card carried by patients that permits authorized access to a central storage location for the patient’s file. The EMR would meet the first of the objectives listed above.

**Personal Electronic Health Record (PEHR):** The second objective listed above is met in various locations around the world by a PEHR, which is a multipurpose record written in language lay people can understand and allowing patients to see their most recent test results, graphical or tabular histories of test scores for particular metrics (e.g., blood pressure), their current and past prescription-drug regimen and so on. There would be electronic links from test results to explanations of these results and further links to the relevant literature, perhaps ordered by level of difficulty. Patients would also find on this record relevant treatment options for particular medical conditions, and guidance for proper health maintenance, including nutrition. Ideally, such a file should also provide links to reliable information on sundry dimensions of the quality of care rendered by individual providers of health care and, to the extent that it is relevant to patients, information on their share of the cost for procuring health care from particular providers of care. Finally, patients could make appointments with physicians via this record, or communicate directly with individual physicians.

All of these desiderata may appear as too much of a load for a PEHR to carry. The fact is, however, that such records are already in use here and abroad and are spreading rapidly. Here it must be noted that the establishment and maintenance of a PEHR requires a sponsor who both finances and manages it. One alternative is to lodge that responsibility with third-party payers, who could recover their costs through premiums or user fees levied on the insured. Another alternative would be to lodge that responsibility with the patient’s “medical home,” that is, the patient’s primary-care physician, who would be explicitly paid for that service by third-party payers (or strictly by government). The model of the “medical home,” now still mainly a concept on the drawing board, has captured the imagination of health policy makers around the world.

One could imagine entrepreneurial companies to establish medical homes, replete with sizeable computer systems and staff to support it, should physicians in their medical practices shun this task. These entrepreneurial companies could contract with both private and public insurance systems.

The other objectives listed above would similarly be met by customized electronic records all of which, however, would share a common, standard nomenclature, to permit easy transmission and comparability of the data. History suggests that the development and adoption of such a nomenclature would require the guiding hand of government, along with at least some public financing.

Of particular note here would be a data system tailored to meet the fifth objective listed above, namely, a system capable of tracking the hospital resource use of
individual, affiliated physicians by medical case and by input, to facilitate holding physicians accountable for the health-care costs they authorize over their signature.

The Financing of a Health Information System

As noted in passing earlier, a state’s or nation’s health information system has dimensions of a public good. In economic analysis a public good is one whose consumption or use by one person does not detract from any other person’s use of that good. A second, less important dimension of a pure public good is that it is non-excludable, which means that everyone can enjoy its use.6

The information produced by scientific research is a pure public good – e.g., Einstein’s famous equation E = MC² or the Pythagorean theorem – is a pure public good, as is the security provided by national defense and homeland security. Clearly, a common database, once it is established, has this feature. Economic theory shows that such goods would be underproduced by the private sector unless their production were collectively financed, typically by mandatory levies such as taxes.

Even goods that appear basically private consumption goods exhibit so-called “positive ties” that represent public-good dimensions. Telephone networks, for example, are such goods, because the value of a privately owned telephone increases with the number of other privately owned phones to which each telephone connects. When one person buys a telephone, all other telephone owners benefit. Economic theory suggests that the production or purchase of such goods should receive public subsidies as well if society wishes them to be produced in sufficient quantity.

The upshot of these reflections is that, because of its connectedness across the health system, a healthcare information infrastructure has dimensions of a public good and thus ought to be supported with public subsidies. The development and maintenance of the system’s common data base (its “spine”) in particular should be heavily government funded, even if the actual development and maintenance is delegated to a private entity.

Furthermore, as already noted as well, to reap the full benefit of a health information infrastructure, participation in it by individual providers of health care should be mandatory.

Progress to Date in New Jersey

Legislation has been proposed that would create a central repository under the authority of the Department of Banking and Insurance. Under the proposal the initial source data for populating the repository would be the electronic claims data processed and maintained by health insurers, including the NJ Medicaid program.

In addition to that information, the proposed repository could also be populated with health data maintained by state agencies, including the following:

- NJ Hospital Discharges (UB-92)
- Cardiac Utilization
- Quality Reporting
- Patient Safety Reporting
- Cancer Registry
- Childhood Immunization Health Registries
- Medicaid/NJ FamilyCare Claims
- Annual Hospital Cost Reports
- Annual Hospital Financial Statements
- Unaudited Quarterly Financial and Utilization Reports

As referenced earlier, the New Jersey Hospital Association and New Jersey Blue Cross/Blue Shield formed the EMR/EHR taskforce to develop Regional Health Information Organizations (RHIO) around the state. Data collected through these organizations could also be used to populate the repository.

Recommendations

New Jersey should develop a clearinghouse/repository for electronic health data that can be accessed by all interested parties.

In essence it is envisioned that the clearinghouse would function as a spine from which users would be able to extract and utilize data to suit their particular needs. While it is anticipated the development of such a system will take several years and occur in incremental steps, there are basic guiding principles that must be followed.

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6 Sometimes an intrinsically public good is artificially made excludable through law – e.g., by patent protection.
1. Public/Private Partnership – the sensitivity of the data mandates that security is paramount. Therefore the oversight and control must ultimately reside with government but the operation and output should include and reflect private sector concerns.

2. Standardization – As with any system the consistency of the terminology is critical.

3. Transparency – the systems basic functionality and data elements must be available at little to no cost and be understood by the general public.

4. Routine Outcome/Health Status Reporting – there should be regular periodic publications that summarize and report key utilization and health indicators.

5. Information already available in payer data warehouses must be used to begin populating the database with historical information that already exists.

6. Hospitals and individual practitioners must have an easy-to-use, one stop repository that can be accessed securely over the internet without forcing the adoption of another unique hardware/software configuration.

7. Laboratories, imaging and radiological facilities should file test results, reports and digitized images with the EHR Custodian for use by providers.

8. Pharmacy Benefit Managers should be required to supply filed prescription information with the EHR Custodian. Steps should be taken to remind consumers to follow recommended medication usage especially in chronic disease management.

9. Durable Medical Equipment Providers and other health care support providers should file reports with the EHR Custodian.

Conclusion

Transparency is a critical step toward improving the performance and accountability of the health care system to “lift the fog” that is currently hindering progress toward high quality, cost-effective care. An information infrastructure is necessary to address the unjustified variances in clinical practice across the state and the nation as a whole. Government must play an important role in the creation of a 21st Century health information system. The characteristics of such a system resemble that of a public good, which firmly calls for a government role – the absence of such a role will lead to chronic underinvestment in this important area and a failure to maximize value from the health care system.
Appendix 8.4: **FINAL SUBCOMMITTEE REPORTS**

### Subcommittee Report 4: Reimbursement and Payment

#### Subcommittee Charge

The Reimbursement and Payment Subcommittee of the New Jersey Commission on Rationalizing Health Care Resources will undertake a review of the following issues and report back to the full Commission in the fall of 2007. Among the issues the Subcommittee will review are:

1. The long term viability and adequacy of the Charity Care payment system
2. The adequacy of the current Medicaid payment rates, to both general acute care hospitals and to physicians including recommendations for potential changes. The Work Group will address the recommendation of the NJHA proposal for the establishment of a Medicaid Commission to review the performance of the Medicaid Managed Care companies operating in New Jersey and overall payment rates for Medicaid Services.
3. Review with the Department of Banking and Insurance current policy regarding Medical Loss Ratio’s of private health insurers in New Jersey and other issues related to the adequacy of private insurer payment rates to general acute care hospitals.
4. Assess and quantify the loss of Medicare outlier payments to the State of New Jersey in light of recent Medicare changes.
5. Identify the potential impact to New Jersey hospitals of proposed Medicare changes to GME and DSH payments.
6. Propose a plan of work for a robust forecast of likely impacts of payment changes over the next several years to the financial state of hospitals in New Jersey.
7. As appropriate the Work Group will solicit the views from a wide range of stake holders on the items listed in 1 – 6 above.

#### Subcommittee Membership

See Appendix 8.4A for a list of the subcommittee members.

#### Overview of Subcommittee Process

The Subcommittee met three times during the summer of 2007. In addition to the meetings, members were provided with materials related to issues listed in the subcommittee’s charge. These included data on state payments to hospitals (subsidies and Medicaid reimbursement) and white papers on some of the issues (NJHA paper on freestanding ambulatory surgery centers and RWJ Hospital paper on NJ Subsidy Programs).

The meetings generally involved a review of materials provided by subcommittee members, then discussion of the various issues included in the subcommittee’s charge. Although the subcommittee looked at all issues listed in the charge, members felt that some were beyond either the subcommittee’s or the commission’s ability to make a difference (e.g. Medicare reimbursement issues). Because the subcommittee did not want to get ahead of DOBI’s planned initiatives to improve transparency in the payment claims process, it did not develop any recommendations on this issue. Limits on time and resources also led the committee to focus on three primary topics – how hospital closures can make existing reimbursement “go farther,” leveling the playing field with respect to freestanding ambulatory surgery centers, and more effective distribution of state subsidies.
Key Findings

Distribution of charity care subsidies

The subcommittee was persuaded that there are many flaws in the current methodology for distributing charity care subsidies. Based in part on a white paper prepared by John Gantner, CFO at the Robert Wood Johnson University Hospital the subcommittee found that:

1) by not taking into account efficiency, some subsidies are rewarding inefficient hospitals;
2) by not taking account profitability, some subsidies are going to hospitals that do not need them to be financially viable;
3) lags in data collection and hold harmless provisions prevent the subsidies from truly following the patients;
4) the documentation requirements encourage hospitals to spend money on documenting charity care rather than pursue collection procedures;
5) hospitals often have to use a portion of their subsidies to pay for physician services for charity care patients; and
6) the delivery of charity care is totally unmanaged.

As a result, there appears to be little correlation between the distribution of the charity care subsidies and county wide poverty rates.

The subcommittee believes that part of the problem is that the state has never really settled on whether the subsidies are support to institutions that serve a particular population or an insurance plan for individuals meeting a certain eligibility tests. On the one hand, there are the documentation requirements and the specific calculations to determine the number of charity care patients seen by each hospital that make it look like an insurance program. On the other hand, the legislative earmarks and hold harmless provisions make it look like an institutional support plan.

The subcommittee recognizes that no supplemental funding is available at this time to expand the various state subsidies. Therefore, the subcommittee discussed two alternative approaches to distributing charity care subsidies.

1. Refine the existing methodology to factor in efficiency and/or profitability.

The Benchmarks Subcommittee has identified a number of efficiency criteria, including measures such as cost per adjusted admission, full-time equivalent staff per adjusted admission, case mix adjusted average length of stay, and days in accounts receivable (a complete list is included in Appendix 8.4B). Charity care subsidies could be adjusted based on an evaluation of hospitals using these or other efficiency measures.

Similarly, the subsidies could be limited to hospitals below certain profitability levels. Calculation of profitability should exclude subsidies because some hospitals with positive operating and/or profit margins would be losing money without the subsidy dollars. The limits could be based on absolute cutoffs or graduated reductions. For example, one approach would be to say that any hospital with an operating margin above x % would be ineligible for a subsidy; an alternative would be to reduce the subsidy for each dollar the hospital was above that target.

Separately or together, these refinements would funnel the subsidies to an arguably more deserving set of hospitals. However, it would still leave issues related to time lags and documentation.

2. Incorporate charity care and other subsidy funding into the Medicaid rates

This proposal is based on the belief that there is a high correlation between a hospital’s Medicaid and charity care patient loads. In other words, the subsidy dollars would go to the hospitals provided the bulk of charity care. Such an approach would also eliminate the need to spend millions documenting charity care and the problems associated with data lags.

This proposal carries with it several implications. First, it is in part driven by the notion that current Medicaid rates are low. Second, there would be a shift in the administration of the charity care funding from the Department of Health and Senior Services to Medicaid,
within the Department of Human Services. Third, since some Medicaid managed care rates are linked to Medicaid fee-for-service rates, the State would have to adjust payments to the managed care companies. Fourth, putting the entire amount of the charity care subsidies into Medicaid rates would cause the State to exceed the Medicaid upper payment limit. This problem could be addressed by distributing the subsidies based on the distribution of Medicaid reimbursement (fee for service and managed care) without actually folding the subsidies into the Medicaid rates.

Freestanding ambulatory surgery centers

Subcommittee members found two significant problems created by freestanding ambulatory surgery centers (ASCs). While most of the discussion in this area was in the context of ASCs, subcommittee members noted that many of the same issues applied to other types of freestanding outpatient facilities as well.

First, the ASCs are not legally obligated to take Medicaid and charity care patients while hospitals are bound by law to accept such patients. For the hospitals, the ASCs represent an economic threat to their financial viability by taking some of the most profitable patients out of the hospitals.

Payers benefit from the lower unit cost at freestanding centers, which makes the ASCs the providers of choice for some plans. However, they also recognize that in rate negotiations, the hospitals attempt to recover the lost reimbursement that results from this adverse selection.

The subcommittee discussed requiring that ASCs serve all payer classes but doubts that such a proposal is workable. Another approach is to deny licenses to new ASCs unless they are partnered with a hospital. Many doubted that this was possible and noted that if only applied to new facilities, it could only have a limited affect at best.

There was more consensus within the subcommittee on the need to level the playing field with regard to regulations and data reporting. Currently, ASCs are not subject to certificate of need requirements, facilities with a single operating room are not licensed by the Department of Health and Senior Services, and reportable events for ASCs are not consistent with reporting requirements for hospitals. The state has little data beyond the number of freestanding facilities; other information on volumes, revenues, and quality is not routinely reported.

If the Commission accepts the need for more consistency, the steps to cure the situation are complex and will require either new regulation and/or additional legislative authority. The subcommittee was in agreement that all operating rooms should be regulated for quality and data reporting regardless of the setting or the number at a particular location. The subcommittee also agreed that, as has been the case in New York State (which recently passed a law imposing new oversight authority for operating rooms in physicians’ offices), that it is most likely merely a matter of time before a significant medical error would occur in an office-based operating room. Therefore, reportable events should be same, regardless of the setting. Finally, the subcommittee (with the Medical Society of New Jersey dissenting) recommended that the licensure exception for facilities and offices with a single operating room should be removed.

Incentives to encourage hospital closings

The subcommittee has strongly articulated the view that the “hospital system” would be financially stronger if a subset of hospitals closed. The argument is essentially that the reimbursement that follows the patients to the remaining hospitals will exceed the marginal costs of treating those patients, resulting in improved operating margins for the remaining hospitals. An ancillary benefit of such closures could be improved quality as well, given that the closed hospital was struggling financially and may not have had sufficient volume to ensure high quality of care.

The state could create a pool of funds to pay some or all of the costs of closing, which could include the outstanding debts, covering losses during a wind down period, and costs to transition the facility to other uses.
The pool need not be funded solely with State monies. Surviving hospitals in the region might be required to contribute to the fund since they would be expected to see a financial boost from the closure of a competitor. Using a simplified model in which the costs of closing were assumed to be net liabilities plus 6 months of operating losses at a rate of 15%, the cost of closing eight hospitals currently in severe financial distress was about $150 million. On the other hand, the model suggests that closing those eight hospitals would generate an additional $160 million in operating gains for surviving hospitals in the first year after closure.

**A core issue here is pacing:** Should the State avoid market intervention and allow hospitals to wither away at their own pace or should the process be expedited, through intervention, in an effort to restructure the market in favor of essential hospitals? Subcommittee members suggested that a slow process could create quality of care concerns and increase the costs of the eventual workout.
### Appendix 8.4A
Reimbursement and Payments Subcommittee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Karen Clark</strong></td>
<td>President/Chief Operating Officer, Horizon NJ Health</td>
</tr>
<tr>
<td><strong>Michael D’Agnes</strong></td>
<td>President/Chief Executive Officer, Raritan Bay Medical Center</td>
</tr>
<tr>
<td><strong>Douglas Duchak</strong></td>
<td>President/Chief Executive Officer, Englewood Hospital</td>
</tr>
<tr>
<td><strong>John Gantner</strong></td>
<td>Treasurer, Executive Vice President, RWJ University Hospital</td>
</tr>
<tr>
<td><strong>Steven Goldman, J.D., L.L.M.</strong></td>
<td>Commissioner, Department of Banking and Insurance, ex-officio member, Commission on Rationalizing Health Care Resources</td>
</tr>
<tr>
<td><strong>Gerry Goodrich, J.D., M.P.H.</strong></td>
<td>Subcommittee Chair, Director of Practice Operations, Weill Cornell Medical College, Cornell University, member, Commission on Rationalizing Health Care Resources</td>
</tr>
<tr>
<td><strong>Richard Keenan</strong></td>
<td>Senior Vice President of Finance and Chief Financial Officer, Valley Hospital</td>
</tr>
<tr>
<td><strong>Michael Kornett</strong></td>
<td>Chief Executive Officer and Executive Director, NJ Medical Society</td>
</tr>
<tr>
<td><strong>George Laufenberg</strong></td>
<td>Healthcare Payers Coalition of New Jersey</td>
</tr>
<tr>
<td><strong>James Leonard</strong></td>
<td>Senior Vice President, Governmental Relations, NJ Chamber of Commerce</td>
</tr>
<tr>
<td><strong>William McDonald</strong></td>
<td>President/Chief Executive Officer, St. Joseph’s Regional Medical Center</td>
</tr>
<tr>
<td><strong>Ward Sanders</strong></td>
<td>President, NJ Association of Health Plans</td>
</tr>
<tr>
<td><strong>Christine Stearns, Esq.</strong></td>
<td>Vice President, Health, Legal Affairs and Small Business Issues, NJ Business and Industry</td>
</tr>
<tr>
<td><strong>Michael Ungvary</strong></td>
<td>Regional Head of Contracting, Aetna, Inc.</td>
</tr>
<tr>
<td><strong>Bruce Vladeck, Ph.D.</strong></td>
<td>Member, Commission on Rationalizing Health Care Resources</td>
</tr>
<tr>
<td><strong>Patrick Wormser</strong></td>
<td>Vice President, Contracting, United Healthcare</td>
</tr>
</tbody>
</table>

**Staff**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steve Fillebrown</strong></td>
<td>Lead Staff to Subcommittee, Director of Research, Investor Relations and Compliance, NJ Health Care Facilities Financing Authority</td>
</tr>
<tr>
<td><strong>Michael Keevey</strong></td>
<td>Director, Office of Reimbursement, Division of Medical Assistance and Health Service, NJ Department of Human Services</td>
</tr>
<tr>
<td><strong>Cynthia McGettigan</strong></td>
<td>Executive Assistant, Commission on Rationalizing Health Care Resources</td>
</tr>
</tbody>
</table>
## Appendix 8.4B
### Efficiency Measures
prepared by the Benchmarking for Efficiency and Quality Subcommittee

<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>
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<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 measure may be calculated based on existing data.
Appendix 8.5: FINAL SUBCOMMITTEE REPORTS

Subcommittee Report 5: Regulatory and Legal Reform

Introduction

The New Jersey Commission on Rationalizing Health Care Resources was established to advise the Governor on issues related to maintaining a system of high-quality, affordable, and accessible health care. The Commission in particular was charged with examining the New Jersey acute care hospital system. The evolution of health care in the United States and in New Jersey has presented challenges to New Jersey’s hospitals. Hospitals are faced with severe fiscal strains, the people of New Jersey are faced with reductions in the availability of care, and the State is presented with the challenge of whether, and in what manner, to intervene to serve the public good.

The Commission acknowledged in its June 29, 2007 Interim Report the fiscal pressures faced by hospitals, and made some preliminary recommendations regarding funding. It noted, however, that other factors must be considered in fulfilling its charge. The Commission charged the Regulatory and Legal Reform Subcommittee with those issues concerning the regulatory structure within which hospitals operate. The Subcommittee met six times. It was chaired by Commission Member Joel Cantor, and included Commission Members Debra DiLorenzo and Steven Goldman, and twenty experts on New Jersey health care law and regulation.

A primary recommendation of this Subcommittee is that the systematic under-funding of acute care hospitals in this State must be addressed. While other recommendations can and should be made, it is the belief of this Subcommittee that until the underpayment issues are addressed, the acute care hospital industry in New Jersey will continue to struggle. This is evidenced by the 17 closures in the past decade and five bankruptcies in the past 18 months.

I. Subcommittee Charge

The Commission charged six Subcommittees to address particular issues to advance the overall project of the Commission. The Commission charged the Regulatory and Legal Reform Subcommittee as follows:

To gather and review background information about current statutory and regulatory requirements governing health care facilities specifically in regards to licensing, certificate of need, and oversight through reporting of administrative, financial, and quality data; identify and review issues pertaining to the Certificate of Need Program including impact of trends in health care delivery, issues related to the implementation of the Certificate of Need Program, and recommendations; identify and review issues related to licensure and health care delivery; recommend revisions in statutes, administrative rules and programs; and serve as liaison to Commission subcommittees to assess necessity for legislative reforms.

II. Overview of Subcommittee Process

The Subcommittee met six times from August to December 2007. Rutgers’ Center for State Health Policy in New Brunswick generously hosted the meetings. Before the meetings, staff circulated material describing New Jersey’s statutory and regulatory structure, particularly as it pertains to Certificate of Need (“CON”) and licensure. Staff also circulated materials on other states’ regulatory structures, and materials produced from non-governmental sources such as the American Health Lawyers Association and the Joint Commission. The Subcommittee requested and received copies of reports of two Commission subcommittees: Benchmarking for Efficiency & Quality and Reimbursements/Payers.

1 See Appendix 8.5A for full roster of Subcommittee members.
Appendix 8.5

The deliberations focused on CON matters associated with the closure of hospitals and alternatives to the existing statutory process for closure, including, but not limited to, the development of an early warning system for distressed hospitals. Additionally, deliberations focused on licensure matters, particularly those concerning the interrelationship of hospitals and ambulatory care facilities and those concerning the governance structure of hospitals. The deliberations were informed by the proceedings of other committees and the Commission activities generally. There was robust discussion, sometimes disagreement, but ultimately the consensus of the subcommittee reached a number of recommendations.

III. General Approach to the Issues

Deliberations focused on several clusters of issues, to which the members returned regularly. These cross-cutting concerns arose in discussion of CON structure, licensure, and other statutory and regulatory issues:

- Adequacy of hospital reimbursement. Members recognized that other Subcommittees were primarily responsible for this issue, but asserted forcefully that the under-funding of acute care hospitals in this State must be addressed. It is the belief of this subcommittee that until the underpayment issues are addressed, the acute care hospital industry in New Jersey will continue to struggle.

- Planning. Members recommended several steps to improve the function of health planning.
  - The State of New Jersey, through both the Department of Health and Senior Services (the Department) and the Health Care Facilities Financing Authority (the HCFFA), has data that can be used to create an “early warning system.”
  - CON regulations should be reviewed regularly to assure that they are consistent with industry and regulatory practice.
  - Prospective health planning should be employed to rationalize health care (particularly hospital) delivery when market forces drive the closure of hospitals. In particular, local and market area health planning was advocated as a means to avoid problems that arise when market forces, rather than prospective planning, are allowed to drive the closure of hospitals.

- The CON process should be comprehensively reviewed to respond to the unacceptable consequences of market forces, which limit access to essential health care services.
- In particular, the CON process for hospital closure should be modified to recognize the realities of the process of the winding down of a failing hospital.

- “Leveling the playing field.” The mixture of regulation and markets in New Jersey leads to some discontinuities disadvantageous to hospitals. Areas of focus included,
  - The imbalance between the regulatory burden on hospitals and ambulatory care facilities, particularly in terms of hours of operation and obligations to accept all patients.
  - The imbalance in the regulatory attention paid to hospitals and ambulatory care facilities, particularly in terms of monitoring quality and reporting of utilization, quality measures, and payer data.

- Governance. Although much of the distress suffered by New Jersey hospitals has resulted from outside forces, members considered possible changes in the regulation of hospital boards. Discussion focused on two issues:
  - Best practices, including some drawn from the application of Sarbanes-Oxley to non-profit boards, should be included in licensure regulations.
  - The Department of Health and Senior Services role should be to improve the ability of governing bodies to respond to changing market conditions. In particular,
    - Board members should receive appropriate training, which is already mandated for new board members by the Hospital Trustee Education law, P.L.2007, c 74. The Department is in the process of promulgating regulations to implement this new law.
    - The Department should provide “early warning” information to boards to allow them to make informed decisions well in advance of times of distress.

- Other legal/regulatory issues. Two additional concerns were the subject of substantial discussion:
  - New Jersey’s physician self-referral law (the “Codey law”) has been interpreted by the Board
of Medical Examiners to permit physicians to operate ambulatory care facilities in a manner that creates challenges to hospitals.

A Superior Court decision (Garcia v. Health Net) recently adopted an interpretation of the Codey law that appears to be substantially narrower than that articulated by the Board of Medical Examiners. Some members of the Subcommittee advocated a narrower interpretation of the Codey Law to reduce this competitive pressure.

- The competitive relationship between physicians and hospitals raises concerns, some of which are addressed by other Subcommittees. Two in particular were raised:
  - Hospitals and physicians experience conflicting incentives with respect to the intensity of services provided inpatients; some realignment is called for.
  - The fiscal pressures experienced by physicians, combined with the sometimes competitive nature of the relationship between hospitals and physicians, have resulted in hospitals experiencing difficulty in providing physician coverage for essential services.

IV. Findings and Recommendations

A. Reimbursement shortfalls drive many of the problems in New Jersey's hospital industry.

A major factor that must be taken into consideration in examining the distress experienced by New Jersey’s hospitals is the level of reimbursement paid by governmental payers. In particular, Medicaid and Charity Care reimburse most hospitals for most procedures at a level below hospitals’ costs, and below the level of Medicare and private payers. Hospitals can no longer cost-shift to make up the difference.

Recommendation:

Governmental payers’ practices must be reviewed to ensure that adequate reimbursement is provided to hospitals and healthcare providers who provide services to beneficiaries of public programs and to the under-insured and uninsured.

B. New Jersey’s health planning process at times does not match with the evolving needs of the health care delivery system.

New Jersey’s health care system is subject to both market pressure and State regulation. Market conditions can change more quickly than regulatory systems. Health planning regulations should be reexamined to make sure that they perform their intended functions in this mixed economy.

B.1. Planning regulations sometimes fall out of date, and are eclipsed by practice.

Recommendation:

The Department should review its CON regulations and update those that are no longer reflective of practice, and discard those that are no longer used by the Department.

B.2. CON regulation of hospital and other health care services clashes at times with the market-driven pressures to which health care providers are also subjected, but proper CON regulation may help to rationalize New Jersey’s health care services.

The Health Care Facilities Planning Act, N.J.S.A. 26:2H-1 et seq., established the CON process to ensure “that hospital and health care services of the highest quality, of demonstrated need, efficiently provided, and properly utilized at a reasonable cost are of vital concern to the public health.” The original purpose of the Act was to encourage highly centralized regional planning. See N.J.S.A. 26:2H-6.1. This process has largely been supplanted by a regulatory process that maintains the structure of planning while becoming largely reactive to market forces rather than prospectively identifying need. Reestablishment of comprehensive State health planning could be problematic because the speed of market changes tends to render regulations quickly obsolete. In addition, the resources that would be needed to maintain a comprehensive planning process are not likely to be readily available to the Department. The Subcommittee agreed, however, that continued State health planning in some form – some argued in a very robust form – is necessary to maintain rationality in the health care delivery market.
The time constraints on the Subcommittee process prevented the full review of this issue that is warranted. The Department should convene a workgroup to review New Jersey’s CON process.

B.3. In some areas of the State, some reconfiguration of hospitals will take place, through market forces or otherwise. The State currently approaches these problems on a hospital-by-hospital basis, and tends to intervene only when a hospital has failed. This process is unnecessarily disruptive to the communities served in these areas.

Recommendation:

The State health planning process should undertake a review of a troubled hospital’s market area to permit a more rational hospital closure and realignment process than results from market forces and the bankruptcy process.

In addition, the Subcommittee strongly recommends that the State of New Jersey create an “Early Warning System” under which representatives of the State, including the Commissioner of Health and Senior Services, a Deputy Commissioner of Health and Senior Services, and the Executive Director of HCFFA (or a senior member of HCFFA), would meet with any hospital CEO and Board of a hospital whose financial indicators moving in the wrong direction early in the process when the hospital might still be able to turn things around. While the Subcommittee did not definitively agree upon the financial indicators to be utilized and instead deferred this to the appropriate Commission subcommittee, we discussed indicators such as “days cash-on-hand, total margin of facility, occupancy, and period of time in which bills are paid. The concept of the Early Warning System is that the State has much data that it receives that shows early signs of hospital distress. Since some members of the Subcommittee expressed concern that hospital boards are not always kept apprised of such distress, this Early Warning System would be utilized to alert the CEO and the Executive Committee of the Board (who can then alert the full board) that the State sees signs of trouble, and give the facility time enough to work on a turn around plan. The feeling of the Subcommittee is that State officials are often involved in a situation of financial distress when it is too late in the process, and since they end up spending enormous amounts of time with distressed facilities prior to closing, this would be time well spent by all involved.

B.4. The current closure process is unwieldy and too narrowly focused on the hospital itself. If a hospital must be closed, the process should be well coordinated to minimize adverse effects on available health care services within the community, and facilitate the continuation of services in the most effective settings possible.

CON applications for closure authorization usually come when closure is a foregone conclusion. The applications, then, become applications for assistance in maintenance of continued operation of surviving services and in ensuring access to other facilities’ resources until shutdown. Problems with cash shortages, labor shifts, and loss of control over the availability of community services can be exacerbated if a bankruptcy court is involved. On the positive side, the CON closure process allows for public involvement and input and often highlights issues related to disposition of employee benefits and essential health care services needs. In limited circumstances, the CON closure process allows the Commissioner to establish conditions for services to continue in a new setting to maintain community access.

The Subcommittee discussed the possibly of shortening the length of time it takes to allow a financially troubled hospital to close, including shortening the completeness review to a specific number of days from application filing. The subcommittee also discussed the coordination of hearing processes required by the State Health Planning Board (SHPB) and the Office of the Attorney General, in order to avoid duplication while protecting the community’s interests.

The Subcommittee advocates a revision in the CON statute to emphasize the need, during the closure process, for maintaining and coordinating the continuation of needed services as a facility is closed. The statutory process should focus on the need for the hospital and the Department to plan for a closure, with the goal of facilitating community
notification and input, and supporting the creation of alternative health care services and provision of essential resources, rather than the simple unwinding of the failed hospital business.

**Recommendation:**

There should be a specific deadline for the Department completeness review of hospital closure applications, along with the Commissioner of Health and Senior Service’s final determination. The Department’s completeness review should not exceed 60 days, which will allow time for the Department’s initial review, submission of questions to the hospital if the additional information is needed and consideration of the hospital’s response. Final approval by the Commissioner should occur within 30 days of receiving recommendations from the SHPB.

The public hearing held by the Office of Attorney General pursuant to the Community Health Assets Protection Act and the public hearing held by the SHPB for a CN Closure should be coordinated to occur on one hearing date.

C. Ambulatory care facilities have expanded in New Jersey, as elsewhere. In many cases, for example, ambulatory surgery centers, the facilities compete directly with hospitals. The competitive playing field, however, is not level, as hospitals retain obligations that have not been imposed on ambulatory care facilities.

New Jersey has partially deregulated health care facilities in recent years. Following this deregulation, ambulatory care facilities have increased throughout the State. See Appendices 8.5B and 8.5C. This deregulation, in addition to being partial, is also uneven in its application. For example, ambulatory care facilities, unlike hospitals, are no longer subject to CON requirements, although they are subject to licensing regulations. See P.L. 1998, c. 43. For example, hospitals are required by law to provide “charity care” access for all medically necessary treatments, although the State’s reimbursement for those services is in many cases far short of the hospital’s cost of providing those treatments. In contrast, ambulatory care facilities have no such obligation, even in those circumstances, such as outpatient surgery, where the hospitals and ambulatory facilities are in direct competition.

Hospitals face hurdles not faced by the ambulatory care facilities in addition to the incompletely reimbursed costs of charity care. For example, most hospital facilities must be available 24/7 in order to serve the needs of emergency departments. In addition, hospitals assert that the ambulatory care facilities with which they are in competition “cherry pick” the less intense cases as well as the insured cases, leaving the more complex and under-insured or uninsured (and therefore more expensive) cases for the hospitals. Finally, hospitals assert that the entrepreneurial nature of modern practice reduces the availability of physician coverage for hospitals, including hospital emergency departments – in part because the charity care system does not pay physicians for their services.

Some of these tensions are the inevitable result of shift in medical practice, as more and more services may appropriately and conveniently be provided in ambulatory settings away from the hospital. The Subcommittee determined, however, that the uneven application of regulations to the two settings exacerbates the effect of this shift, harming hospitals and creating windfalls for ambulatory care providers. The Subcommittee considered two types of regulations in this context: those that mandate the provision of services, and those by which the State engages in oversight, data collection, and quality control.

As to the former, the solutions are somewhat uncertain. The burden of providing charity care, focused as it is solely on hospitals, might be extended to some categories of ambulatory care facilities. For example, New Jersey recently enacted a law that requires outpatient renal dialysis facilities to provide a limited amount of free care. See P.L. 2007, c. 79. In addition, many ambulatory care facilities are required to pay assessments in lieu of providing free care. The funds derived from this assessment during the 2005 – 2007 period is significant, but many of the Subcommittee believed it was not adequate to fairly offset the cost of charity care provided by hospitals during that time. Some members suggested that a careful study is

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3 NJSA 26:2H-18.57 establishes the ambulatory care facility assessment. It requires facilities with gross receipts of at least $300,000 and licensed to provide one or more of the following services to pay a gross receipts assessment: ambulatory surgery, computerized axial tomography, comprehensive outpatient rehabilitation, extracorporeal shock wave lithotripsy, magnetic resonance imaging, megavoltage radiation oncology, positron emission tomography, orthotripsy, and sleep disorder.
necessary to assess the burdens of providing charity care and the impact on hospitals and ambulatory care facilities to determine an equitable and appropriate assessment.

With respect to data collection and quality assurance, the Subcommittee was able to reach concrete recommendations. The Subcommittee determined that the licensure regulations for ambulatory care facilities should be amended to require forms of data reporting and quality control at a level similar to those applied to hospitals, while taking into account the differences between the forms of operation.

C.1. The current structure of health delivery results in direct competition between hospitals and ambulatory care facilities for many services, but the regulatory burden on hospitals to operate emergency departments and to provide care to all regardless of ability to pay or source of payment imposes an imbalance that should be addressed.

Recommendation:
The State should remedy the competitive imbalance between hospitals and ambulatory care facilities to the extent the imbalance is exacerbated by State regulation. If charity care continues to be required to be provided by hospitals across all hospital settings (emergency room, inpatient care, surgery, outpatient care, etc.), the State must take steps to assure that the burden of charity care does not unfairly disadvantage hospitals in their competition with ambulatory care facilities. Similarly, the requirement that hospitals, but not ambulatory care facilities, accept Medicaid and other public forms of insurance suggests that the State should act so as to avoid this requirement from creating unfair competitive imbalance.

C.2. The migration of increasingly complex services to ambulatory care facilities has not been matched by proportionate regulatory oversight of these facilities. As a result, the State may not adequately monitor the service quality, payer mix, and administrative structure of these facilities.

Recommendation:
The Department of Health and Senior Services should review the reporting requirements of ambulatory care facilities to ensure that it receives appropriate information to permit it to monitor the quality of the care provided, and to ensure it receives appropriate data on utilization, payer sources, cost reporting, and the identity and number of practitioners participating in care. The gathering of these data could be provided through the use of uniform bills and other reporting mechanisms now employed to gather information from hospitals.

The Department should examine whether it can adopt the standards employed by such organizations as the Accreditation Association for Ambulatory Health Care (AAAHC) or the American Association for the Accreditation of Ambulatory Surgery Facilities (AAAASF) for these purposes. Adopting approval by these oversight entities as “deemed
status” for at least some purposes could streamline the regulatory process for both the Department and the facilities.

C.3. The Department should develop reporting mechanisms and implement reporting requirements for ambulatory care facilities to provide complete data regarding utilization, patient visits by payment source, number of visits, number of practitioners, cost reporting and quality measures. In addition freestanding ambulatory care centers must issue a uniform bill (UB04) for all patients so volumes and referrals may be tracked. Ambulatory care centers should have to comply with all aspects of the Patient Safety Act, and be subject to the same reporting and quality requirements as hospitals. Physician specific data should be unblended so that physician referral patterns may be tracked and evaluated.

D. The governance of non-profit hospitals in New Jersey is accomplished through the leadership and/or contributions of volunteer directors and trustees. The structure of this governance and the regulation of non-profit boards have changed little during the decades in which the operation of hospitals has grown increasingly complex. The regulation of these boards and the recommendation of best practices to their members should be reviewed and brought up to date.

Non-profit hospitals rely on their boards to oversee the hospital’s management, and to ensure that the hospital operates in a way that is consistent with the needs of the community. Those boards are populated by volunteers, often people from the community with little experience in the oversight of entities operating on the scale of modern hospitals, and frequently with little familiarity with hospital operations. This community source and orientation of board members has remained unchanged as hospitals have become more complex.

Several national organizations have examined the role, structure and regulation of non-profit boards, including the boards of non-profit hospitals in recent years. The Joint Commission, the American Law Institute, and the American Health Lawyers Association are all engaged in such reviews.

D.1. Board members need appropriate education on their obligations, their hospital’s mission, and the operations of non-profit hospitals. Orientation of new members is particularly important.

Recommendation:
The law requiring new hospital board members to attend orientation sessions should be implemented to maximize new members’ ability to engage in appropriate oversight. N.J.S.A. 26:2H-12.34.

D.2. New Jersey law vests with the Attorney General the responsibility of overseeing the conduct of the boards of not for profit corporations. This oversight is particularly important as not for profit corporations, unlike for-profit corporations do not have shareholders with an interest and the ability to monitor the corporation’s conduct. The Attorney General is charged by law with filling this void by exercising appropriate oversight of board conduct.

Recommendation:
The New Jersey Attorney General should respond appropriately to information, from whatever source, tending to show that the board of a non-profit hospital is derelict in its obligations to carefully oversee the management of the hospital. It should investigate promptly to determine if board misconduct or inattentiveness imperils the hospital. The Department, as the regulatory agency most intimately familiar with hospital operations, should in appropriate cases make referrals to the Attorney General for such purposes. The Attorney General should intrude into board affairs only when necessary to preserve the hospital’s community mission.

D.3. The Subcommittee recognizes concerns that board members are sometimes unaware of a hospital’s financial difficulties until too late, and that they are sometimes not provided by
hospital management with adequate information to respond to financial crises.

Recommendation:

Hospital management should be encouraged to share appropriate financial information with board members on a timely basis. The Department should work with hospital management, boards, and the HCFFA to ensure that boards are aware of financial crises as well as the options available to salvage the hospital’s resources and health care mission, on a timely basis. Sale and closure should not occur in circumstances of extreme crisis, and should be initiated well before significant dissipation of assets and allow conversion of resources to sustainable uses that are mission-consistent.

D.4. Information regarding the makeup of hospital boards, even including the names of the people who serve as directors or trustees, is often not available to the people of the community. Hospitals are important community assets, and the governance of boards should be approached with an eye toward transparency.

Recommendation:

Information regarding the governance of hospitals should be available to the people of the community. While dated, much of the information is available on the Internet for those who know where to find it at locations such as www.guidestar.com. Some Subcommittee members believed Hospital Boards should place information on the hospital’s website, including their Form 990, an information return that most secular exempt organizations with incomes above $25,000 are required to file annually with the IRS, to permit easy access for the public.

D.5. Board governance in the for-profit sector has been rocked by repeated scandals in recent years, as board members and management have intentionally flouted their responsibilities to their shareholders and the public. One result was the passage of the American Competitiveness and Corporate Accountability Act of 2002 (the “Sarbanes-Oxley Act”), which mandated certain corrective steps in corporate governance. Many of the steps mandated for commercial firms have been recommended for adoption by non-profit firms.

Recommendation:

The Department should mandate the adoption of suitable portions of the Sarbanes-Oxley requirements by non-profit healthcare facilities. It should be noted that time constraints prevented the subcommittee from identifying which provisions of Sarbanes-Oxley should be extended to non-profit providers in New Jersey.

E. The relationship between hospitals and their physicians is sometimes not harmonious, and instead creates competitive tensions. As is described above, ambulatory care facilities are in direct competition with hospitals for some services, and those facilities are often operated by the hospital’s own physicians. In addition, hospitals and physicians can experience conflict on the management of patients within the hospital, and can disagree on the obligations of physicians to cover needed patient care services within the hospital.

Several developments in health finance have combined to complicate the relationship between hospitals and physicians. As is noted above, hospitals have contended increasingly with competition from ambulatory care facilities. Those facilities are typically owned by physicians. The physician-owners perform procedures in these ambulatory care facilities that they had previously performed in the hospitals with which they now compete.

New Jersey and federal law limit the ability of physicians to refer patients to facilities in which they have an ownership interest. See 42 U.S.C. 1395NN (the “Stark Act”) and N.J.S.A. 45:9-22.4 et seq. (the “Codey law”). There is currently conflicting authority on the proper interpretation of the Codey law. The Board of Medical Examiners has described an interpretation of the Codey law that permits physicians to refer to ambulatory care facilities in which they have
an ownership interest, while a recent Superior Court decision has articulated a narrower interpretation. Several members of the Subcommittee urged that the law is most properly interpreted narrowly to restrict many of the forms of ownership and referral currently permitted under decisions of the New Jersey Board of Medical Examiners.

In addition, the Subcommittee considered the tensions that distort hospital finances when payers – particularly but not exclusively Medicare – create incentives for hospitals to economize on patient care and simultaneously for physicians to practice expansively within the hospital. As it is physicians and not hospitals that control admission, management, and discharge of patients, this conflict is difficult for hospitals to manage. This issue, as the Subcommittee was informed, is within the charge of another Subcommittee.

Finally, the changing economic pressures and incentives experienced by physicians interfere with a cooperative relationship by which hospitals have historically staffed necessary services such as emergency departments. Physicians are under increased pressure to stay in their offices, seeing patients, rather than taking call at hospitals. In addition, some of the call services are in direct conflict with the activities of some of these physicians within their outside ambulatory care facilities.

E.1. Hospitals, physicians, and proprietors of ambulatory care facilities disagree on the proper scope of self-referral laws, particularly the Codey law. It is in New Jersey’s interest to have this conflict resolved quickly.

Recommendation:

The Department, in conjunction with the Office of the Attorney General, Division of Consumer Affairs and the Board of Medical Examiners, should take measures to ensure that the self-referral provisions of federal and state law are properly enforced.

E.2. Hospitals and physicians are subject to conflicting pressures with respect to the management of hospital patients. This conflict distorts the management of hospitals, and limits the ability of hospitals to manage patient care consistently and appropriately.

Recommendation:

The Department should examine methods to align the incentives of hospitals and physicians in the management of patients, consistent with appropriate patient protection standards.

E.3. Changes in physician practice has eroded the ability of hospitals to rely on voluntary staffing by physicians of necessary hospital services.

Recommendation:

The Department should undertake a comprehensive review of this problem in conjunction with hospitals and physicians. To the extent it can be addressed cooperatively by accommodating the needs of all parties, such cooperative solutions should be favored.
Appendix 8.5A
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As of August 2007, New Jersey has 766 ambulatory care facilities. However, due to geocoding limitations, only 759 could be mapped, and several facility locations are approximate.
As of August 2007, New Jersey has 766 ambulatory care facilities. However, due to geocoding limitations, only 759 could be mapped, and several facility locations are approximate.
Subcommittee Report 6:
Hospital/Physician Relations and Practice Efficiency

Executive Summary

- The present report represents the work of the Subcommittee on Hospital/Physician Relations & Practice Efficiency, one of six empanelled to advise the Commission on Rationalizing Health Care Resources in New Jersey Commission established under Executive Order 39, promulgated by Governor Jon S. Corzine on October 19, 2006.

- The Subcommittee on Hospital/Physician Relations and Practice Efficiency was charged to:
  - Identify and characterize the most significant factors and aspects of the relationship among New Jersey’s acute care hospitals and physicians.
  - Focus on high-cost high reward aspects of physician practices and performance.
  - Evaluate the importance and application of available standards and metrics.
  - Report findings and recommendations to the full Commission.

- The Subcommittee met in plenary session four times with additional workgroup meetings, considered expert opinion and information, raised issues and discussed possible initiatives and action in the following four areas:
  - Payment System
  - Institutional infrastructure
  - Metrics and Reporting
  - Regional Coordination

- The Subcommittee’s attention was drawn to several areas that bear critically on hospital and physician relationships but which are too broad to fit within its charge. Reform and change in these areas is vital to the long-term improvement of New Jersey’s health care system.
  - Regionalization of health care resource allocation and utilization.
  - Tort reform.

- Medical Malpractice insurance reform and relief.
- Alternative concepts for delivery of acute care services.

- The Subcommittee proposes ten recommendations specifically addressed to improving hospital and physician relations and improving practice efficiency.
  - These recommendations are especially relevant and essential for financially stressed institutions.
  - These ideas also have general applicability to and offer value to all acute care institutions.
  - These recommendations are summarized below for ready reference and discussed in detail in the body of this final report.

Summary Recommendations

1. Encourage alignment-oriented payment systems or models for acute hospital care that financially impact, engage and involve physicians.

   Structural non-alignment of financial incentives invites abuse and rewards medically irrational and counter-productive decisions.


   Evidence-based medicine standards are underutilized and un-enforced in the acute care setting.

3. Coordinate care from admission through post-discharge with standards and incentives based on quantitative metrics and results.

   Coordinated patient care from admission through in-patient treatment to discharge and follow-up treatment and services is not the standard of care in New Jersey.
4. **Increase institutional transparency for acute care costs**, utilization and care alternatives to enable cost and treatment-effective decisions.

   Imperfect knowledge of acute care costs and resources inhibits informed, rational choices, decreases trust and confidence and disables accountability.

5. **Establish 365 day standards of operation** for an expanded range of services that optimize acute care resources utilization.

   Service and coverage reductions on weekends and off-hours inhibit best practices and cost-effective resource utilization.

6. **Set standard and parameters for physician on-call obligations** for emergency department service regionally and state-wide.

   Hospitals cannot impose ED service call obligations on physicians, and often pay significant fees to secure essential coverage.

7. **Make “intensivist model” the standard of ICU care** and a priority for all hospitals, especially financially distressed institutions.

   Intensive Care Units provide patients with life-sustaining medical and nursing care on a 24-hr. basis but are not typically staffed with optimally trained personnel.

8. **Leverage scarce physician services** through the expanded use of practice-extenders and other means to increase effective access and availability.

   Scarcity of key medical specialties can create service bottlenecks and inefficiencies.

9. **Exploit existing IT systems** and technology to enhance physicians-hospital interaction, improve access to in-patient data, and take greater advantage of information resources.

   Hospitals do not take advantage of IT to increase interaction with physicians.

10. **Create an acute care data warehouse**, hospital network, and uniform data standards and formats.

    Comparative hospital performance metrics, data compatibility and exchange capabilities are lacking in New Jersey.
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Introduction

On October 19, 2006, Governor Jon S. Corzine promulgated Executive Order #39, identifying the need to examine the availability and delivery of health care services in New Jersey, and develop recommendations toward the creation of a state wide health plan. The Commission on Rationalizing Health Care Resources in New Jersey, chaired by Dr. Uwe E. Reinhardt, Professor of Economics and Public Affairs, Woodrow Wilson School, Princeton University was established to implement the Order.

The work of the Commission was assigned to six subcommittees, each addressing a particular topic relevant to the overall mission. The present report represents the efforts of the Subcommittee on Hospital/Physician Relations & Practice Efficiency, co-chaired by Risa Lavizzo-Mourey, MD, Co-Chair, President and CEO, Robert Wood Johnson Foundation, and Anthony C. Antonacci, MD, SM, FACS, Co-Chair, Vice President for Medical Affairs & Chief Quality Officer, Christ Hospital. Fred M. Jacobs, M.D., J.D., Commissioner, Department of Health & Senior Services, also served on this subcommittee.

Charge

The Subcommittee on Hospital/Physician Relations and Practice Efficiency will:

• Identify and characterize the most significant factors and aspects of the relationship between New Jersey’s acute care hospitals and physicians affecting institutional viability and financial integrity, cost-effective use of resources, physician relations and practice efficiency, and the delivery of quality health care.

• Focus on high cost-high reward aspects of physician practices and performance. Examine key criteria, including: length of stay, prescription drug charges, procedure charges, consults, etc.

• Evaluate the importance and application of available standards and metrics, e.g., best practices, Leapfrog, “report cards”, etc., paying special attention to the impact and importance of these issues to the situation of New Jersey’s most financially stressed acute care hospitals.

• Report findings and conclusions to the full Commission and recommend institutional, legislative and policy initiatives that will positively impact the financial and care crisis affecting New Jersey’s acute care institutions.

Membership

The Subcommittee on Hospital Physician Relations and Practice Efficiency consisted of 23 individuals who freely contributed their time and energy to achieving its goals. Candidates were identified and selected through a painstaking process undertaken by the Commission, its Executive Director and the Governor’s Office of Appointments. The membership of the subcommittee now represents a wide range of interests, backgrounds and perspectives relevant to many of the shared concerns and issue affecting hospitals and physicians. A list of members and administrative personnel appears immediately before the introduction to this report.

Meeting Schedule:

The Subcommittee held four meetings in the course of its operations. The initial meeting was held at the Department of Heath and Senior Services, the Robert Wood Johnson Foundation provide meeting space, conference facilities and amenities for the second and third meetings, and the final meeting was hosted by the Medical Society of New Jersey. The Subcommittee gratefully acknowledges the organizations and their staff for making the required arrangements. The schedule of meetings held appears below:

• July 5, 2007
• July 24, 2007
• August 21, 2007
• September 10, 2007

Methodology

The Subcommittee convened its initial meeting under the co-chairship of Drs. Risa Lavizzo-Mourey and Anthony C. Antonacci on July 5, 2007. Fifteen members attended in person and 7 by conference call. The meeting proceeded in open discussion resulting in a decision to develop and circulate a conceptual framework that would guide the work to be done.

A second meeting was held on July 24, 2007 with 20 members present and one call-in. The conceptual framework was reviewed and a decision made to divide the work of the Subcommittee among four areas of strategic focus:
• **Payment System** – addressing issues of discontinuities and disparities among payors, individual providers and institutions, in compensation, reimbursement and their relationship to abuse and medically irrational and counter-productive decisions.

• **Institutional Infrastructure and Support Systems** – addressing the unmet needs of acute care institutions for systems and procedures that incorporate best practices and make optimum use of available resources to minimize excess costs, delays and waste.

• **Institutional Reporting and Metrics** – addressing the potential for improving adverse event and outcome reporting and quality metrics throughout New Jersey’s acute care facilities.

• **Regional Coordination of In-Patient and Out-Patient Care** – addressing deficiencies in pre-admission and post-discharge care and follow-up to minimize admissions, maximize clinical progress, and reduce readmission rates.

Each member picked an area of interest and contributed in subsequent work sessions.

Workgroup assignments were as follows:

**WG1 - PAYMENT SYSTEM**
Gregory J. Rokosz, D.O., J.D
William A. Rough, MD
William B. Felegi, D.O.
Robert Spierer, MD
Ira P. Monka, DO
Richard G. Popiel, MD, MBA
Michael J. Kalison, Esq.

**WG2 – INFRASTRUCTURE**
Carolyn E. Bekes, MD
Linda Gural, R.N.
Benjamin Weinstein, MD, PhD
Virginia Treacy
Sara Wallach, MD

**WG3 - REGIONAL COODINATION**
Anthony C. Antonacce, MD, Co-Chair
Henry Amoroso
Ann Twomey
Joseph W. Kukura, Rev.
Michael Shebabb, CPA
Gary S. Horan

**WG4 - METRICS AND REPORTING**
Risa Lavizzo-Mourey, MD, Co-Chair
Darlene Cox
Charles M. Moss, M.D.

These work groups each produced a brief report and recommendations which provided the basis for further discussion and comment and formed the foundation of this report.

On August 21, 2007, the Subcommittee held its third meeting. Sixteen members attended, with three call-ins and 4 members unavailable. The work groups shared their discussions, findings and recommendations with the entire subcommittee. Comments and suggestions where noted. Core recommendations were prepared and circulated prefatory to submission of a draft report to the membership for review and revision.

All input was collected and incorporated in a draft report sent to the membership in advance of the final meeting of the Subcommittee held on Monday, September 10, 2007 at the Medical Society of New Jersey. Twenty-one members attended with three call-ins and one member unavailable. Comments, changes and editorial suggestion were made and a final report sent by email for approval. The present final report represents the end-product of that process.
General Observations and Comments

The New Jersey Commission on Rationalizing Healthcare Resources is focused on the situation faced by New Jersey’s most financially distressed hospitals and the critical factors contributing to their distress. The tasks of its subcommittees are aimed at identifying problems and issues and developing recommendations that will aid institutions in crisis regain a sounder financial footing, improve management and efficiency, enhance the delivery of quality health care, and maintain essential services in light of current and future health care needs.

The Subcommittee on Hospital Physician Relations and Practice Efficiency has made a number of specific recommendations which it believes may together or separately contribute to improving elements of the relationship among New Jersey’s acute care hospitals and their physicians. While many of these recommendations will require the agreement and collaboration of different stakeholders and may take considerable time and energy to implement, the governors, trustees and senior management of each acute care institution bear direct and ultimate responsibility for the fortunes of facilities under their collective direction and control.

Management, oversight and direction of the State’s acute care institutions must start from within, be driven from the highest levels of executive authority, and carry the weight of organizational commitment. Each individual holding a senior position of responsibility must understand his or her role as an active and engaged participant in the life of the hospital, and understand that role as one for which they can and will be held accountable.

The Subcommittee is also aware that its recommendations cannot be considered apart from larger issues affecting health care in New Jersey. Issues such as the state’s fiscal crises, medical insurance and tort reform, economic and life-style pressures on physicians, the needs of New Jersey’s highly diverse population, and the growing number of under- or non-insured persons all contribute to and complicate the present crisis.

Acute care facilities in New Jersey share a responsibility to deliver a comprehensive range of care to all persons, regardless of their ability to pay. Notwithstanding, it is impossible and irrational, medically, economically and otherwise to maintain identical capabilities at all acute care institutions. Some form of regional coordination is essential to rationalize the utilization of scarce resources and provide essential services to all populations in the state. Regionalization of scarce health care services must play a key role in rationalizing health care in New Jersey.

Medical malpractice insurance costs and the threat of costly, even devastating litigation is a powerful disincentive to systemic reform, practice improvement, and innovation. It dissuades physicians from practicing in this state and contributes to shortages in key specialties. Tort reform is a politically charged, legislatively challenging but essential component of a long term solution to New Jersey’s health care crisis.

Declining revenues are as much a cause of the financial distress experienced by many of New Jersey’s Hospitals as rising expenses. In a long-term trend, both private and public payors have reduced payments and reimbursements for medical services, consumables and resources, and have adopted more restrictive authorization standards. The financial squeeze is exacerbated by the growing impact of non-paying users – the uninsured or under-insured.

It is beyond the scope of this report to examine or comment on the implications, justifications and rationale for the present state of affairs – it may be enough to observe that even as the base of adequately insured, paying patients weakens, the weight of uninsured care grows unabated. This is a questionable recipe for a sustainable system of care.

Physician-owned for-profit ambulatory care centers have made significant inroads into the traditional profit base of many acute care institutions. It is increasingly difficult for traditional acute care institutions to derive sufficient income from insured patients and high-value procedures to offset the costs of uninsured charity care. State charity care payments defray only a portion of those costs. While ambulatory care centers undoubtedly meet a growing market demand and often offer a cost- and quality effective alternative to acute care institutions, there are pragmatic as well as ethically grounded reasons that argue these centers should share some of the charity care burden.
In some localities, the state is now virtually supporting certain acute care institutions. Close scrutiny and oversight of performance and management are required in circumstances where significant public funds are being spent. The imposition of these controls, however, is creating something very like virtual public hospitals. This unintended consequence begs the question of whether, assuming the prospects of these institutions is unlikely to change, instituting some more formal and explicit system of public health care ought, in some cases, be examined as an alternative.

Regardless of which recommendations may be selected for further study, the Subcommittee strongly urges that all “stakeholders” be involved from the earliest planning stages through implementation and ongoing management and oversight of initiatives. Only if all parties affected understand the crisis, are assured their interests are represented and viewpoints considered, and have confidence that needed changes and compromises further the common good and not a private or partisan agenda will there be reasonable prospects for success. Private, not-for-profit and public entities can play a vital role in the necessary process of public education, discourse and debate.

Much use of the term “stakeholders” is made in this report and elsewhere in discussing the healthcare system. In the interests of clarity the Subcommittee offers its own, non-exclusive list of “essential” stakeholders and potential participants:

- New Jersey’s acute care hospitals and health care systems
- Medical Society of New Jersey (MSNJ)
- The New Jersey Association of Osteopathic Physicians and Surgeons (NJOAPS)
- New Jersey Hospitals Association (NJHA)
- Catholic Health Partnership of New Jersey
- New Jersey Council of Teaching Hospitals (NJCTH)
- State Board of Medical Examiners
- New Jersey State Nurses Association
- Physicians’ professional associations
- Private medical insurers and payors
- Health care worker’s unions and associations
- Public Sector payors (Medicaid, Medicare)
- New Jersey Department of Health and Senior Services (NJDHSS)
- New Jersey Department of Banking and Insurance (NJDODI)

### Issues, Findings and Recommendations

The Subcommittee has selected what, in its view, are the most critical issues for New Jersey’s acute care hospitals and physicians. While many of the recommendations made in this report can be expected to make a significant impact on financially distressed institutions, they also have broad relevance for the relationships among New Jersey’s acute care hospitals, physicians and payors, as well as the communities they serve.

The relationship among New Jersey’s acute care hospitals and the physicians who provide essential care is complex, and no one factor or solution can be identified as either the cause or cure for all problems and risks. Some of the more salient aspects of the situation are mentioned below:

- Hospitals and physicians do not operate on a common or compatible set of practice-oriented and financial concerns with respect to the medical management of patients and the provision of in-patient services.
- Hospitals have not provided financial details and transparency on the cost of services or care. It is not surprising that physicians have little appreciation of the cost implications of their care and treatment decisions on hospitals.
- Physicians face little accountability for consumption of hospital resources, consults, length of stay, etc. Over-utilization of medical resources and “defensive medicine” is common practice at many institutions.
- There are no accepted standards of measurement for hospitals and physicians and consequently no means to compare or evaluate performance, quality, effectiveness and efficiency.
- New Jersey physicians have not, in many instances, been quick to adopt even the most widely recognized and accepted evidence-based protocols, guidelines, and best practices.
- There are no financial incentives to coordinate care or assure patients have access to continued care once they leave the hospital.
- Economics of small practice groups which characterize the New Jersey market makes broad-based innovation and change more difficult than in markets characterized by larger specialty group and multi-specialty group practices.
The Subcommittee on Hospital Physician Relations and Practice Efficiency believes its findings and recommendations provide insight and guidance for the better management of acute care facilities in general and especially those facing financial challenges.

**Payment System**

Closer alignment of hospital and physician financial incentives for hospital care almost certainly holds significant potential for improving cost efficiency and rationality of health care resource utilization. There are several strategies that may be employed to help achieve such a goal including goal-based incentives, reimbursement systems for physicians based on severity-adjusted Diagnosis-Related Groups (DRGs) or Relative Value Units (RVUs), or other means of sharing gains in productivity and cost-savings. Detailed study and evaluation of plans and strategies for improving alignment of payors¹, hospital and physician financial incentives is a key recommendation.

Certain physician practices and behaviors can have a significant impact on the effectiveness (quality) and the efficiency (resource consumption) of outpatient and inpatient care resulting in waste, inefficiency, delay and unfunded inpatient care. For example, a commercial payor may deny or downgrade a hospital stay as medically unjustified, but nonetheless reimburse the physician responsible for the decision. Medicare payors pay hospitals a fixed rate, but hospitals remain at risk if a physician is an inefficient user of hospital resources. Presently, hospitals have no effective means available to correct, discipline, or exclude outliers and even outright abusers.

On the other hand, New Jersey physicians receive some of the lowest reimbursement rates in the nation for treating Medicaid patients, while hospitals are paid at considerably higher rates. Such a misalignment of incentives is regarded as a key reason for lack of physician availability in hospitals serving a large proportion of Medicaid patients.

Better alignment of financial and practice incentives among hospital systems, physicians and payors will help close service gaps, reduce counter-productive attitudes, and encourage more cost-effective practices. Any such initiative must take measures to avoid the risk that, as physicians and hospitals payments are more closely aligned, patients’ interests may be unduly constrained. For example, patients who, for medical reasons, should receive extended or more intensive care may be faced with increased or more complex barriers. Safeguards including procedural checks, rights to second opinions, and a swift and straightforward route of review and appeal are essential to assure fairness and protection of patient rights as the economic interests of physicians, hospitals and payors are brought into alignment.

**Institutional Infrastructure and Support Systems**

Hospital infrastructures and support systems are in many cases ill-adapted to present institutional needs, financial realities and physician practices. Attempts by physicians and hospital staffs to compensate for these deficiencies can result in practices and behaviors that can weaken the institution and diminish the quality of care.

Unlike some hospital resources, sickness, disease and trauma do not diminish on weekends and holidays. Service and coverage reductions on weekends and off-hours impact more than patient care and convenience. They can result in needlessly extending hospital stays, may place patients at greater risk for hospital related complications, and cause waste and delay. New Jersey’s acute care institutions should consider the economic feasibility of providing a more comprehensive range of services every day of the week to ensure timely and effective care, optimize resource utilization, and control costs.

Physician availability, particularly among certain specialties and especially in the ED, is a major limiting factor in improving the overall performance of ED services and optimizing the use of physical and human resources on a daily basis. There is a growing disinclination among some physicians to accept traditional on-call obligations, an increasing trend toward limiting care for charity cases to the initial ED encounter, little apparent interest in innovations such as the increased use of practice extenders, or receptivity to improvements in practice and practice models.

¹ “Payors” as used here refers to public and private third party payers, and excludes self-insured individuals or co-payees.
Reductions in public and private physician reimbursements, increasing concerns over medical liability, life-style issues, and increasing numbers of under- or uninsured individuals all play some role in creating and perpetuating this situation. Physicians must become active partners and be convinced of the value to themselves and their patients of making practice changes and working with their institutional partners to achieve desired changes.

**Metrics and Reporting**

Establishment of standards and measures of quality, outcomes and efficiency for physicians and hospitals is a key to strengthening the acute care system. It is well established that measurement improves performance among hospital staff, physicians, and institutions in general. Tracking resource utilization, length-of-stay, end-of-life issues, and performance on key clinical indicators associated with the most frequently used DRGs, among other metrics, is a key to raising quality, efficiency and performance.

Lack of confidence in and acceptance of performance criteria, collection methods, data analysis and reporting have been major hurdles to agreement on the meaning and interpretation of results, their relevance and validity, identifying problems, and deciding on action steps and solutions. The logistics, IT resources, expertise and costs involved in developing establishing and maintaining state-wide metrics and reporting are significant. No one institution can or should bear this cost. The source of funds to defray expenses and provide the necessary resources requires serious and careful consideration. Unless these issues can be resolved, they will mean defeat for any effort to establish quantitative standards.

The implementation of professionally endorsed, evidence based, and unbiased institutional and physician metrics and reporting would be a major step forward in realizing the benefits of evidence-based medicine on a broad scale in New Jersey. Active engagement of all key stakeholders in the endeavor is essential.

**Regional Coordination of Health Care**

Regionalization can be an important strategy in achieving a more rational and sustainable health care system. Coordination of care on a regional basis involves redefining acute care “market areas” within a broadened conceptual framework. Such a framework must take into consideration a range of economic and demographic factors and an evaluation of the “essentiality” of both institutions and key services modules.

Regionalization is one way hospitals may achieve the goal of providing a comprehensive range of services on an everyday basis. It is very likely some institutions will find it impossible to provide all such services in the face of shortages of key specialists, or simply because it is economically unfeasible to do so. In such cases, providing certain services on a regional basis may be the best workable solution.

The concept of Centers of Excellence is not new in the health care field but is one that can be readily adapted to provide enhanced service and quality, sounder financial management, and improved utilization and efficiency on a regional basis. New Jersey has already made a significant move in this direction with the establishment of its Level 1 Trauma Centers. Conditions of a non-emergent nature could be candidates for similar programs.

The subcommittee is aware this topic is receiving in-depth consideration by other subcommittees advising the Commission and is confident their recommendations will be in accord with its own concerns.

**Critical Areas for Structural Reform**

Regionalization of health care resources, tort reform, restructuring medical malpractice insurance within New Jersey and consideration of alternatives to traditional concepts and patterns for delivering acute care will have profound and far-reaching impact in and outside the health care system. While specific recommendations for change and reform in these areas are outside the charge and scope of this Subcommittee, these issues are regarded as so crucial to the long-term resolution of New Jersey’s health care crisis they demands mention.
here, even in summary manner. The Subcommittee is confident these subjects are being thoroughly studied by other subcommittees advising the Commission and that well-considered recommendations will be forthcoming.

Regional Coordination of Health Care

Regionalization of scarce health care services offers some of the most challenging and potentially rewarding opportunities to rationalize New Jersey’s acute care system. There is a wide disparity across the state in the scope, quality and availability of acute care services. Acute care facilities in New Jersey vary considerably in their economic resources, physician and staff availability, scope of physical plant and in-house capabilities and services.

Many institutions are essential to their service areas but cannot, for financial or other reasons, provide all needed services on a sustainable basis. Conversely, there are other institutions with ample physical plant and medical resources which would benefit from increased utilization. Nevertheless, they all have an equal responsibility to deliver a comprehensive spectrum of care to all persons, regardless of ability to pay.

Regional coordination will require either regulatory or legislative action and in any case will not be immediately attainable. An effective plan of regionalization must take into account a thorough assessment of community needs on a local and regional basis. Such a plan may need to encompass adding or expanding essential services where gaps are identified, as well as combining capabilities and eliminating or reducing clinical redundancies. Support will be required to assist institutions transitioning operations from non-essential to essential services, and relocating under-utilized resources and capabilities to more robust institutions. Above all, hospitals (and other key stakeholders, such as unions) must be persuaded such far-reaching structural changes are in their best long-term institutional and financial interest.

The following points represent some of key issues and concerns that will arise in considering how regionalization can be realized:

- Community needs must be balanced against institutional viability and rationality at every point in the process of regionalization.
- Are physical, intellectual and human resources being rationalized, re-used, recycled, retooled and restructured wherever possible?
- Is there a net positive impact on quality care, access and cost? How does this break down by patients, physicians, communities, payors, and caregivers?
- How well are logistics, transportation, and community needs addressed?
- Does the regionalization plan serve a broad range of patient needs efficiently and effectively?

Regionalization should be initiated on a demonstration or pilot basis, with the involvement and oversight of the Commissioner, Department of Health and Senior Services. Such an initiative should engage and involve all key stakeholders, including community groups, payors, physicians, institutional staff and management and focus on meeting service gaps in critical specialties and redirecting utilization of scarce resources. Hudson County may be especially well-suited for such a demonstration project.

Reformation of Tort Liability Law

There is now a serious lack of key specialties in New Jersey (e.g. obstetrics, neurosurgery, mammography services) driven in part by the reputation of New Jersey’s courts as “plaintiff-friendly” and the steep rise in medical liability insurance rates. Action by the legislature will undoubtedly be needed if meaningful tort reform is to become a reality in New Jersey. Comprehensive tort reform represents a formidable political and legal challenge but remains one of the key objectives for improving the long-term viability and vitality of New Jersey’s health care system.

A crucial objective is ensuring the continued availability of essential on-call specialties and reducing the disparity in tort liability between acute care institutions and physicians providing ED services. This could be accomplished by raising the tort standard from simple negligence to gross negligence/willful misconduct for all care rendered for such services by on-call physicians.
Medical Malpractice Insurance Relief

Increases in medical liability premiums in New Jersey have contributed to a crisis in both the availability and affordability of mandatory medical liability insurance. Moreover, recent court decisions suggest a continuing judicial bias in favor of plaintiffs, notwithstanding contractual and other legal barriers. A key long-term objective should be to ameliorate the burden of medical liability insurance first on specialists in high risk practice areas to ensure New Jersey residents continued access and availability to these vital services, and then more generally to physicians in all lines of practice.

The state should explore affordable, alternative means of obtaining insurance at appropriate levels, while maintaining the right of injured individuals to recompense for damages. It may also be feasible to condition such preferred liability coverage to approved programs that incorporate compliance with well-validated and widely recognized, evidence-based standards of care and treatment.

Comprehensive medical malpractice insurance and tort liability reform must be part of long-term plans to rationalize health care resource utilization in New Jersey. Targeted tort reforms aimed at retaining key acute care specialties and services must at a minimum receive serious consideration.

- On-call/ER physician services
- Obstetrics
- Neurosurgery
- Critical care and trauma physicians
- Oral/maxillofacial specialists
- Primary Care

Alternative Concepts for Delivery of Acute Care Services

For-profit ambulatory care centers are a growing presence on the health care landscape. Many physicians have significant financial interests in these centers and often refer their patients to them in preference to hospitals providing the same services. Procedures done at these centers are typically high value, and even if not “cherry-picked,” divert an important revenue stream away from acute care hospitals. If New Jersey is to have a unified system of care, these centers should be required to shoulder some portion of the burden of charity and uncompensated care which now falls entirely on the hospitals and the physicians providing that care.

In other markets, the payer mix, demographics, access, and population density may be insufficient to sustain the necessary level of care and services, even with the best management, processes and oversight available. Some hospitals in these areas seem chronically resistant to change, have persistent issues of fiscal crisis and mismanagement, and suffer from consistently substandard quality and patterns of misuse and abuse.

Regionalization, service initiatives, programs and mandates may not be enough to address the problems these hospitals face. While these same institutions are often vital and “essential” to the communities they serve, they may only continue to operate with massive long-term financial support from the state.

The necessity for oversight and accountability for public funds is creating in some of the most severely stressed institutions something approaching a de facto public hospital status. In view of this, it may be prudent to consider a broader range of options, including but not limited to the creation of a formal public hospital designation or perhaps a state-funded public hospitals corporation with the mandated requirements of performance, transparency and accountability. Obviously, such a step is not to be undertaken lightly, but it should be borne in mind that such systems can work and in fact have long records of meeting vital public health needs.
Recommendations

1. Alignment of Hospital and Physician Financial Incentives

**Issue**
Structural misalignment among payors, individual providers and institutions, and inadequate reimbursement invites abuse and rewards medically irrational and counter-productive decisions. Inefficient patterns of practice, misuse of scarce resources, denials or delays in coverage or payment, unduly burdensome pre-certification processes, and panels with too few participants may serve short-term financial interests, but have lasting adverse effects on physicians’ willingness to provide care, institutional strength and patient health and well-being.

Acute care institutions are often caught between conflicting demands for service by physicians and coverage decisions by payors. The absence of a coherent framework of incentives for providing and compensating cost-effective medicine and care is at the root of the problem.

**Discussion**
Admissions and discharges are typically driven by physician decisions. However, where such decisions do not meet reimbursement criteria for medical necessity or level of services, it is irrational and inimical to institutional financial health for payors to deny reimbursement to the hospital while continuing to compensate for physician services.

There are also instances where a payor may cover an ED visit, but deny payment for physician services. For example, it is common for a payor to require referral to an “in-network” provider for a patient stabilized in the ED service. But if a patient cannot locate such a specialist promptly, and requires subsequent follow-up in the ED, coverage may well be denied for the treating physician’s services.

Misuse and overuse of consultants is a significant problem in many institutions. Presently, hospitals have little or no control over this aspect of physician practice which can lead to sharply increased expenses without an improvement in patient care. Beyond instances of outright abuse, there is a large opportunity to improve practice and reduce costs by eliminating unnecessary and extended consults.

Examples of irrational decisions and counter-productive results could be multiplied, but the lesson to be drawn is the same. Payment and coverage decision-making is deeply and often critically disconnected from caregiving and medical decision-making, often to the detriment of patients and providers. While payor decisions are clearly a major factor, it is a dangerous oversimplification to place the blame entirely on insurers, or for that matter, any other single player or stakeholder group. New paradigms of care, payment, accountability, and patient involvement and responsibility are clearly needed.

If a medical or treatment decision, admission, continued stay or discharge is not medically necessary, both the institution and physician should bear similar financial and legal consequences. Both the physician and the hospital should be at risk for non-payment if a medically inappropriate decision (i.e. one not supported by an agreed treatment algorithm) is made, and conversely be equally exposed to (or protected from) litigation for the consequences. Institutions, physicians and patients alike should have ready access to review and revision if such any decision results, or is likely to result, in patient harm. This would stimulate better working relations among physicians, the hospital, physician advisors and case managers to improve overall efficiency in operations and rational utilization of resources, while assured patients rights are maintained, protected and defended.

However, not every medical decision translates readily into increased or decreased costs or impacts length of stay, nor can desired change in all cases be achieved by placing pressure on the primary care physician. For example, if a treatment or test is postponed because a service is closed or a specialist unavailable, it is both unfair and ineffective to penalize the primary care physician for the delay. Thus, an across-the-board system of rewards and correction cannot be applied to all physician decisions that may result in additional in-patient days.

One solution to avoidable delays and extensions of stays may lie in achieving seven-day per week operations as
discussed elsewhere. Another approach may involve innovative ideas regarding compensation of physicians for in-patient care that increase alignment of financial incentive among physicians, hospitals and payors.

Alignment-oriented payment schemes that provide physicians appropriate incentives for cost-efficient case management through case-rates or severity-adjusted payments but that do not unduly impose penalties for unavoidable or unintended consequences should be thoroughly examined. This is an area requiring careful study of alternatives and demonstration projects before widespread implementation can confidently be recommended.

Physician education is a key to rationalizing proper use of consultants. The process should begin in medical schools and continue through training programs and CME. Demonstrating that cost-effective medicine has a positive financial impact and that over-utilization neither improves outcomes nor reduces lawsuits is an available strategy that may reduce the use of non-essential consults.

Public payors and private insurers must adopt uniform standards of review and consequences so physicians and hospitals can make consistent and rational decisions without regard to the source of payment.

Benefits and Risks:

- Educate and incent physicians to practice cost-effective medicine, reward physicians based on system cost savings, and eliminate or reduce incentives to over-utilize resources and continue defensive medicine tactics.
- Rationalize the appropriate use of consultants and consulting practices through physician and medical student education.
- Align financial interests and liability exposure for hospitals and physicians to improve physician accountability for appropriate use of hospital resources.
- Establish uniform hospital and physician payment criteria for all payors (public and private sector.)
- Alignment-oriented payment systems must not actually or apparently improperly incentivize hospitals, physicians or payors to withhold, curtail, or deny medically necessary care.

Recommendation

- Establish, enable or support the implementation of alignment-oriented payment models or systems for acute hospital care that financially impact, engage and involve physicians.
  - Funding for the incentives required to implement such a system must come from savings generated within the present scope of payments and reimbursements.
  - Payor fees schedules should be completely and publicly disclosed.
  - Safeguards must be built-in to protect patient rights to all medically necessary care and provide percentage-based payment for out of network services.
  - A carefully designed, geographically limited and closely monitored pilot or demonstration project would be a prudent first step.

2. Physician Accountability and Evidence-Based Practice in Acute Care Institutions.

Issue

The value of evidence-based medicine standards is well-recognized for producing improved case management, better patient outcomes and cost-efficiencies in the acute care setting. This is especially true for some of the most common and costly diagnoses where such standards have been extensively researched and promulgated.

Even where such standards are widely recognized, however, New Jersey hospitals and physicians have made little progress in agreeing how to implement them, measure results, or how to reward, induce or coerce compliance. This has made it nearly impossible to assess the level of practice, identify leaders and outliers and implement any system of evidence-based rewards and corrective action within a given institution.

Discussion

Though hospitals have a vital interest in physicians practicing the most cost-effective medicine, their ability to induce such behaviors is limited. Collection and dissemination of information on physician performance, whether available to the public at large or a more limited
peer group can promote physician accountability and adherence to evidence-based practice guidelines.

Many physicians regard such measures with suspicion as unwarranted intrusions into their professional prerogatives. Some find the mere suggestion of standards and the threat of publicity offensive, if not threatening, and move business to less aggressively managed hospitals. Unless the effort is based regionally or state-wide, attempts to use metrics and peer-pressure will put all but the strongest institutions at increased competitive disadvantage and potential financial risk.

Physician report cards can work only if they are designed so that the information is valued and used by the physicians themselves. Standards of measurement must be widely accepted and validated if ratings and rankings have the desired effect of motivating and modulating behavior in positive directions. Implementation of such tools demands a cooperative and collaborative effort, as well as agreement on shared goals and outcomes.

Many insurers have access to demographic and clinical data that can be used to produce performance metrics at the physician and patient level. New Jersey insurers should be strongly urged to cooperate in developing standardized quality performance reports for New Jersey similar to those developed in New York (MetroPlus) and Minnesota (HealthPartners). Such reports could represent an important component of an acute care report card initiative.

Benefits and Risks

- Broad participation in standards development encourages buy-in and reduces bias concerns.
- Regional implementation of physician report cards levels the playing field for weak and strong institutions and encourages best practices, especially in key specialties.
- Implementation may disadvantage institutions dependent on marginal providers and possibly divert business elsewhere.

Recommendation

- A properly validated, well-accepted, independently complied, and publicly available physician report card system that measures performance and outcomes on critical, evidence-based standards of acute care practice should be developed and implemented on a regional or state-wide basis.
  - Priority and focus should be first placed on key specialties and high-cost, high-risk conditions and diagnoses.
  - Insurers, MSNJ, NJHA and other state-wide organizations should participate in the study, research and validation required for this effort.

3. Coordinating the Continuum of Care

Issue

New Jersey’s health care system does not adequately ensure the management of a patient from admission through in-patient treatment to discharge and follow-up treatment and services. Lack of organizational structures and financial incentives for such a continuum of care adversely affects medical outcomes and increases the total cost of medical care. Discontinued care or lack of follow-up can result in a readmission which might have been avoided by a more timely intervention.

The problem is made worse by the practice of some physicians who restrict their engagement with charity care patients to a single ED encounter, limit the range of services they are willing to perform, or fail to manage the clinical condition to conclusion. Reimbursement and liability concerns are likely drivers, but fall short of excuses, for such behaviors, which in extreme cases can amount to the virtual “abandonment” of the patient. This increases clinical costs, creates liability exposure, may place patients at increased risk and degrades health care quality.

Discussion

There are at least three key components to establishing a continuum of care that are within the existing capabilities of New Jersey’s acute care facilities. Hospitals can establish guidelines to assure patients are admitted to the most medically appropriate service, insist ED physicians manage patients to an appropriate point of transfer, and ensure discharge procedures provide for appropriate follow-up, after-care, or outpatient services.

Hospitals traditionally do not question admission to a primary care provider’s service or make an independent
determination whether another service or specialist care would be more appropriate and efficient. However, procedures that ensure patients are admitted to the appropriate service will increase their likelihood of receiving well-managed treatment from the onset of care through discharge or transfer. Consultation and/or recruitment of other providers should be coordinated by the appropriate admitting physician. In situations where hospitals lack needed specialty resources, regional relationships could fill the gap.

Hospital policies must clarify the scope of physician responsibility for all ED cases, and articulate unambiguous professional, ethical and legal standards to ensure patients receiving treatment in the ED service are managed through to clinical resolution and appropriately stabilized, discharged or transferred. Stronger inducements, including legislative mandates may be necessary if such encouragements prove insufficient.

Utilization of appropriate post-discharge care can mean better outcomes, more compassionate care, and greater cost-efficiency. This may include local or regional access to long term ventilation units, vent/dialysis units, long-term acute care facilities (aka LTACs), nursing homes, and hospice care. Discharge procedures should encourage such choices and efforts should be made to reduce or eliminate any financial barriers that may inhibit considering such alternatives.

Managing the continuum of care for the highest cost diagnoses (DRGs) may offer the best opportunity for realizing a measurable benefit from a coordinated approach. CHF (congestive heart failure) is a good example, representing one of the most common and costliest DRGs. Coordination of in-patient care and outpatient support through specialists, anticoagulation and/or CHF clinics is likely to prove a readily available, cost-effective strategy.

In all cases, incentives or other forms of encouragement are needed to achieve better management of patients throughout the continuum of care.

**Benefits and Risks**

- Ensure optimal management of all patients from admission to post-discharge treatment to conserves the benefit of treatment, reduce readmission rates, and forestall clinical deterioration.
- Ensure involvement of the appropriate specialist from admission through discharge or transfer.
- Restructuring significant aspects of the physician-patient relationship and ED practice patterns will require engagement and commitment by senior management and institutional governance.

**Recommendation:**

- Encourage coordinated care through a system of appropriate incentives and standards for achieving measurable results, that will at a minimum:
  - Assure patients are admitted to the most medically appropriate service
  - Require ED physicians to manage patients to an appropriate point of transfer, and
  - Establish discharge procedures that provide for appropriate follow-up after-care or outpatient services.

- Study and development of specific guidelines for implementing coordinated care on an individual institutional basis is a likely necessity and strongly urged.

4. **Transparency & Accountability for Acute Care Resource Utilization Costs**

**Issue**

Imperfect or non-existent knowledge of the cost of care and resources inhibits physicians and consumers from making informed, rational choices, decreases trust and confidence and disables accountability for decisions.

**Discussion**

The cost of hospitalization and associated resource utilization is not widely appreciated by treating physicians, much less by the public at large. Without such information, physicians and patients may make unwarranted or inappropriate demands for non-essential services, over-use or misuse hospital resources, and fail to appreciate justified denials or consider alternatives to such services. These factors tend to raise the overall level of dissatisfaction in and distrust of many aspects of the health care system.

Greater financial transparency would increase comprehension of the financial impact of treatment
decisions and make creation and adoption of quality and cost performance expectations for physicians rational and equitable.

**Benefits and Risks**
- Financial transparency engages physicians in resource utilization decisions
- Removes elements of uncertainty contributing to suspicion and distrust
- Empowers consumer-directed health care choices.
- May threaten marginal institutions dependent on higher cost services to offset uncompensated care.

**Recommendation**
- Increase institutional transparency for acute care costs, utilization and care alternatives to enable cost and treatment-effective decisions.
  - Hospitals should explore ways of publishing and communicating accurate, relevant and timely information on the cost of care, resource utilization and alternatives to inform and help guide physician decision toward the most cost and treatment-effective choices.

5. **365 day Optimization of Hospital Resources**

**Issue**
Hospitals maintain emergency department and other essential services at all hours of the day or night, providing vital and life-saving resources to their communities. However, hospital staffs and ancillary inpatient services are reduced or limited on weekends and off-hours which, while saving money, can mean important diagnostic tests or treatments must be delayed, sometimes for days.

Consequences of this may include medically unnecessary stays, patient inconvenience and exposure to infection risk, and associated waste, delay and cost. While some service capabilities should undoubtedly be provided on a 365-day basis, it is unclear whether and to what extent non-essential services would be cost-justified if available on a similar basis.

**Discussion**
Optimizing hospital resource utilization throughout the year is not formulaic and will require study, tailored recommendations and well-managed implementation for each institution’s unique situation. The importance and role of institutional governance in such an endeavor cannot be too strongly emphasized.

While it may not be possible for a hospital to provide every service at all hours throughout the day, there are identifiable aspects of effective coverage that all hospitals can and should maintain every day throughout the year. These include the implementation of specially trained coverage for ICU units, physician extenders and actions to address any deficits in on-call coverage.

**Benefits and Risks**
- Enhanced patient care, improved outcomes.
- Incremental implementation can start with highest cost units.
- Spread work load to normally less productive hours.
- Reduce unjustified (and unreimbursed) LOS

**Recommendation**
- Hospitals management should be encouraged to define and adopt standards of operation for an expanded range of services that optimize utilization of physical plant and human resources on a 365 day basis.
  - Where essential in-house resources or specialized services are unavailable or not cost-justified, management should seek to form and/or participate in regional networks to address the identified deficiencies.
  - Hospitals should invest in and incent programs such as Intensivist and physician extender programs that are proven to have a measurable impact on cost-savings, resource optimization, efficiency and effective patient care.
- Funding of such programs must be internally cost-justified. The State should provide assistance in developing economic and business modeling for financially distressed hospitals.
6. Standardization of Emergency Department Service Call Requirements

Issue

New Jersey is one of the few states in the Union that has foregone creation of public hospitals in favor of a state-mandated requirement that all acute care hospitals provide medical care to all persons regardless of ability to pay – the so-called “Charity Care” system. As a practical matter, this often means the Emergency Department must provide an extensive range of comprehensive care and services.

In addition, the Emergency Medical Treatment and Active Labor Act (EMTALA), also known as the patient anti-dumping law, encompasses emergency care in the ED (including on-call specialists as required), OB care for women in labor, and psychiatric emergencies. The law provides for an appropriate medical screening examination for any person requesting examination or treatment for a medical condition at an emergency department. It is the hospital’s obligation to determine if there is an emergency medical condition and if so, to stabilize the patient or arrange transfer him to another appropriate facility.

Many hospitals can no longer enforce Emergency Department (ED) service call obligations on physicians, and in a growing trend, must pay significant fees to physicians in order to secure urgently needed and essential coverage. While this may not be a burden to some institutions, it is undoubtedly problematic for others.

In some cases, the lack of ED on-call physicians means patients have limited access to needed medical care and lack of appropriate follow-up or continuity. Change is needed to ensure all acute care institutions have the access to critical specialty physicians needed to fulfill their obligations.

Discussion

Physicians (specialty physicians in particular) are increasingly disinclined to accept on-call obligations, resulting in strains on access and availability of key medical services to the particularly vulnerable populations for whom the ED may represent the only means of access to the health care system. "On-call" physicians are (unlike hospitals and their employees) fully exposed to tort liability and risk not being compensated for treating the uninsured (unless, as is increasingly the case, the hospital has contracted them to do so.)

Historically, ED service obligations were more or less expected from physicians in consideration of attending privileges. A return to the former “soft” system of obligation is not anticipated. One option is a mandatory on-call requirement for all physicians. However, making on-call service “mandatory” for all physicians via regulation, legislation or hospital policy raises difficult questions of equity, bargaining power, legality and enforcement.

Fines and licensure actions seem too extreme, while suspension or curtailment of privileges is not a realistic option for many institutions. Moreover, the institutional landscape is not uniform. Requiring obligatory on-call service would be far less burdensome on physicians in suburban hospitals due to the relatively small number of charity care and Medicaid cases. Urban hospitals, in contrast, would face difficulty recruiting and retaining physicians who could expect to shoulder a substantial burden of uncompensated care. (There is also a widespread but largely anecdotal perception that charity care patients pose a higher medical liability risk than other patients.)

Paying for on-call services is a poor but in some cases necessary strategy, inasmuch as hospitals are mandated to provide certain services under EMTALA. Where such arrangements provide for flat fees only and do not pay for each episode of care, there is a built-in bias toward under-delivery and over-payment. Moreover, flat fees are paid independent of any reimbursement or other compensation a physician might receive. A better system might tie payments to services actually rendered on some equitable pre-determined basis.

Initiatives considered elsewhere in this report and perhaps by other subcommittees may provide a partial solution. Establishment of and participation in a comprehensive system of regionalized care or Centers of Excellence and expedited transfers may provide a medically responsible and financially sustainable means meeting public expectations of the ED service, as well as the legal demands of Charity Care and EMTALA.
mandates. The widespread use of such centers has the potential to change the current paradigm of ED care and alter the traditional pattern of reliance on on-call services.

The crisis in on-call service is exacerbated by the problems and risks, real or perceived, of providing care in the ED setting. The issues of compensation and liability for providing such services need to be addressed to ensure adequate and consistent on-call coverage and continuity of care.

**Benefits and Risks**

- Increasing on-call service will reduce service bottlenecks and disparities in care for under-served populations.
- Increasing the trend toward payment for “on-call” status is a poor solution that places additional strain on institutional finances.
- Mandating on-call obligations is a controversial and potentially divisive concept that poses major obstacle to implementation, may adversely impact care, and perhaps reduce availability and access.
- Compensation for on-call services is a better approach in principle but presents unresolved issues of funding.
- Regionalization could reduce the need for each institution to have access a wide range of on-call specialties.

**Recommendations:**

- Physician obligations and expectations with respect to ED service should be standardized (or at least rationalized) regionally or even state-wide to ensure adequate medical coverage and fulfillment of statutory mandates. However, there is lack of consensus on the means to accomplish this end. Several ideas have been proposed:
  - Mandatory (via statute or regulation) call and continuity of care obligations for all physicians at all facilities.
  - Increased incentives for Medicaid and uninsured cases, compensation for taking call in urban areas, and perhaps malpractice premium relief.
  - Compensation for EMTALA-related services on an episode-of-care basis rather on a flat fee basis.

  - Regional Coordination and Centers of Excellence should be examined in light of their impact on demand for on-call services.
  - Lifetime or age cap for on-call service hours.

### 7. Intensivist Model for ICUs

**Issue**

Intensive Care Units provide patients with life-sustaining medical and nursing care on a 24 hour basis but are not typically staffed with specially trained personnel. Typically, ICU patients are among the sickest, highest risk and most expensive cases in the hospital.

**Discussion**

Quality of care and cost-effective treatment in the ICU setting are maximized when they are provided by trained staff whose only responsibility is the care of patients in the unit. Such “Intensivist” programs, when properly executed are recognized as cost-savings measures that also improves the quality of patient care.

A minimum requirement for such a program would provide service on a 365 day basis for at least eight hours per day, preferably during hours of greatest risk and/or limited coverage. In some institutions, telemedicine and remote centers can be a highly effective and cost-efficient means to implement intensivist capabilities in whole or in part. An “Intensivist Model” of ICU care and case management provides multiple benefits.

**Benefits and Risks**

- Better utilization of resources and ICU beds, organizational throughput and lower LOS,
- Better adherence to practice guidelines and best practices and coordination of care in complex cases
- Better patient outcomes, lower mortality rates, potentially higher patient and family satisfaction, more effective treatment of end-of-life issues, improved organ donation efforts.

**Recommendation:**

- Adoption or implementation of an Intensivist Model of ICU Care should be a priority for acute care hospitals statewide and especially financially distressed institutions.
- Hospitals should be encouraged, rewarded and/or recognized for implementing intensivist programs and capabilities.
- The State or other organizations should enable and assist program development wherever possible.

8. Leverage Professional Resources

**Issue**

Physician availability is a critical factor that impacts a hospital’s ability to respond effectively to patient need and efficiently utilize its resources. Reduced services, staffs and coverage on week-end and holidays, declines in on-call physician availability and shortages of key medical specialties can limit access and availability.

Even where physicians are available to provide in-patient coverage, the pressure to maximize the use of their professional hours is often extreme, reducing the amount of time available to each case and each situation demanding their attention. These factors contribute to service bottlenecks and inefficiencies, and may result in added costs and increased risk.

**Discussion**

While there is no short-term means for increasing the supply of specialty physicians in under-served localities in New Jersey, there are other strategies for leveraging scarce physician resources in the acute care setting that potentially offer economic and quality improvements.

In many situations, “practice extenders”, such as Intensivists, case managers, hospitalists, physician assistants and advance practice nurses have the potential to provide cost-effective means of achieving quality and efficiency goals in appropriate circumstances. Advanced practice nurses, for example have independent practitioner (IP) status which enables them to be independently compensated. Recognition of and compensation for the services of other practice extenders, such as Physicians’ Assistants (“PAs”), would expand their use, helping to realize more effective and cost-efficient resource utilization.

According a class of practice extenders such as Physicians' Assistants IP status might facilitate this, and could allow greater flexibility in matters such as getting orders co-signed within narrow time constraints. On the other hand, this may raise new issues of practice autonomy, training and expertise, and liability. It is also not clear whether and under what circumstances Physicians' Assistants themselves might desire or accept independent status. Any such change will require further study and should not distract attention from the need to expand their utilization through recognition of and compensation for the value added.

Other capabilities such as telemedicine services could, if appropriately compensated, help multiply the effective reach of vital physician services. Financial incentives or support from the state or other organizations may be required to overcome cost barriers to acquiring the IT infrastructure needed for telemedicine and remote monitoring.

Extensive implementation of leveraging strategies will impact and alter the practice model of individual physicians in important and perhaps radical ways. Institutional priorities must reflect and embody the commitment of the governing board and senior management to the needed change and establish clear goals. Practice leaders, staff and employee representatives must be brought into and “buy into” the process.

**Benefits and Risks**

- Reimbursement for the services practice extenders more generally would expand their use and enable more cost-effective leverage of scarce physician resources.
- Patients will receive a net increase in care, hospitals will gain greater coverage at reduced cost, and physicians can make better and more profitable use of billable time.
- Various combinations and patterns of practice extenders, intensivists, case managers, hospitalists, advance practice nurses, remote and telemedicine capabilities can be combined to augment the delivery of care and expand physicians’ availability.
- Solutions can and should be tailored to meet the needs and capabilities of each individual particular institution and health care system.
- Initiatives in this area must be undertaken and endorsed at the highest levels of hospital governance in cooperation with payors, physicians...
and representatives of the various groups of practice extenders to succeed.

- Hospitals (and especially financially stressed institutions) may need guidance to make cost-effective selections among the wide range of available options.

**Recommendation**

- Hospital management should explore and expand the use of practice extenders and other options for leveraging, extending and augmenting the professional presence and expertise of physicians.
  - Provide enhanced compensation for the use of selected practice extenders, such as Physician Assistants, even if not separately compensated as “Independent Practitioners”.
  - Hospitals should work closely and cooperatively with its physicians and regional hospitals to optimize the benefit of such efforts for patients, doctors and the institution itself.
  - The State should assist financially-distressed institutions in identifying qualified consultants and solution providers who can help define and implement such initiatives.

9. **Exploit Existing Electronic Capabilities and IT**

**Issue**

Electronic data, communication and information technologies continue to evolve and proliferate through the economy and society, but so far these tools are underutilized by the healthcare system. There are significant efforts already underway, notably NJHA’s efforts to enable a Regional Health Information Organization (RHIO) in New Jersey which promise to dramatically improve connectivity and communication among physician, hospital facilities and staff. These efforts require long-term commitment, substantial investment, support and encouragement. Nonetheless, it may be possible to realize more modest gains sooner, and with much less effort and cost.

**Discussion**

There are many ways to make use of advances in information technology that are far less complicated and more readily attainable than the widespread implementation of electronic medical records or the creation of broad-based health information complexes.

The web is an existing resource that could dramatically enhance the relationship and communication between physicians and hospital staff without major reengineering or capital investment. Existing hospital IT systems could be used to provide physicians’ offices with the ability to remotely monitor hospital patients to achieve more timely, quality- and cost-effective decision on interventions, treatment, discharge or other dispositions.

On-line information, consultation and reference resources for physicians and hospital staff are within reach of existing technology and could be implemented at comparatively low cost. Electronic sharing of information, case histories, and best practices could be a cost effective means of education and promoting better medical and cost-efficient management. Intranet messaging may prove a useful and readily accessible means of communication as it has in other contexts.

The discharge and transfer process could be better handled through electronic means and as discussed elsewhere, may help ensure continuity of care. Electronic means could be used to obtain real or near-time information on discharge and intermediate care options, hospice, palliative care, rehab, LTC, etc., to shorten discharge time. The state might be able to offer assistance in locating consultants and solution providers.

Finally, institutions, payors and other stakeholders, perhaps pharmaceutical firms or insurers might be find it in their interest to support aspects of the effort to improve connectivity and communication among target groups of practitioners and selected institutions, even on a limited basis.

**Benefits**

- Improve physician-hospital communications to increase efficiency and productivity.
- Near or real-time remote access to patient records can improve accuracy and timeliness of clinical decisions.
- Distance learning technologies can enhance access to reference resources, learning and enable information exchange.
- Private sector support and/or funding are worth exploring.
- Legal and regulatory issues (HIPAA, Stark, IRS, etc.) must be considered and addressed.

**Recommendations:**

- Utilize existing hospital IT systems and standard web access to provide physicians remote, real-time access to clinical monitoring and/or data.
  - Institutional and text messaging, physician home page, etc could be an integral part of such a system
- Establish on-line practice resources and institutional physician information
  - Medical references, research, journals and other library services
  - Institutional and/or healthcare system-specific information on resources, treatment protocols, best practices and other informational bulletins and updates.
  - State IT and library resources may be available to help pool resources and reduce subscription costs.
- Explore feasibility of using on-line discharge information systems or providers to shorten discharge wait times and improve patient placement.

**10. New Jersey Health Care Data Warehouse**

**Issue**

Quantitative comparative measures of hospital performance do not exist in New Jersey. Disagreement over whom and what to measure delays or prevents needed action, and can have but one outcome for a failing institution. Beyond agreement on the tools and criteria, there must be confidence in the impartiality and objectivity of the process.

**Discussion**

A vital task of the Commission is to help determine the viability of hospitals that are currently operating “marginally,” and recommend incentives for improvement. The availability of reference standards and measures of performance would inform and benefit all acute care institutions, but is an absolute necessity for the effective management of hospitals in crisis.

The mechanics of such a system – the data collection instruments and evaluation algorithms and criteria - can be developed on a regional or state-wide basis, drawing from good practices, experience and evidence-based guidelines and use quality assurance experts, trained statisticians and data base development experts as needed. Data on patient outcomes and institutional performance would be submitted by New Jersey’s acute care hospitals to a central data repository or warehouse.

It is essential that all stakeholders be involved in the process of developing metrics and the methodology of collection, collation and dissemination of the information. The end product should be a comprehensive hospital patient health care and outcomes data set, collectively designed and independently maintained, to serve as a publicly available reference standard.

Such a system may well be implemented as a spin-off of the RHIO initiative mentioned above. However, as the data warehouse concept could be implemented at an earlier date and with less expense. It might also be utilized as a precursor to the more ambitious data collection aims of the RHIO project.

**Benefits and Risks**

- Increase transparency and metrics for New Jersey’s acute care hospitals and health care system
- Wide availability to all payors, healthcare plans, institutions and physicians will encourage broadly accepted metrics and performance standards.
- Serve as the mandatory standard of reference for all institutions requesting or requiring extraordinary (beyond currently authorized Charity Care) state financial assistance for their operations.
- May impose extra costs on institutions, compete with or made superfluous by other public or private efforts.

Related initiatives that may further such a project:

**New Jersey Hospital Management Data Network**

New Jersey acute care hospitals do not presently have the means for real-time exchange of non-proprietary, non-confidential data. Like many
institutions in the state, hospitals tend to be local and relatively isolated, with limited interaction with peer institutions.

- A hospital management data network, created by the hospital associations and member institutions, could provide managers of acute care institutions non-confidential information to better assess their performance and progress compared with their peers.

**Uniform Data Standards and Formats**

Uniform data standards and formats would enable much improved oversight, data and best-practices sharing, as well as transparency, measurement and accountability among New Jersey’s acute care institutions.

- Standard for forms and data capture and entry should be created and promulgated implemented by all hospitals. Immediate candidates for standardization include a uniform clinical data reporting sheet and a new, customized New Jersey UB Type 04 medical claim form.

**Recommendations**

- Consideration should be given to establishing a New Jersey Health Care Data Warehouse containing outcomes and performance data from a wide spectrum of participating acute care institutions.

- New Jersey should assist all acute care institutions in identifying consultants and solution providers to develop the required IT and MIS resources.

- Standardization (or at a minimum, agreed ways of normalizing) of admission, charting, treatment and discharge procedures should be developed to allow comparative assessments of performance.

- Contributors must include the Medical Society of New Jersey, the hospital associations, health care insurers, public payors, appropriate professional societies and the final product must bear their unanimous endorsement.

- The state should explore options to host, support and maintain the database, to assure compliance with HIPAA and other applicable laws and regulations, and provide neutrality.

- Funding options should be explored, including grants, user fees, subscriptions or subsidies for financially distressed institutions.

**Conclusion**

The crisis in acute care facing many communities and institutions in New Jersey is profoundly affected by the relationship between the hospitals that provide access to services and the physicians who provide the care. While these stakeholders share many interests and goals in delivering effective and high quality medical care, in too many instances financial pressures, structural inefficiencies, imperfect information and irrational patterns of traditional practice, resource allocation and use defeat or deflect the achievement of these ends.

The recommendations provided in this report if implemented in whole or in part, can be part of the answer to rescuing New Jersey’s most at-risk institutions, bringing quality care to underserved communities, and raising the level of health care available to all persons seeking it within the state.