MEETING OF THE BOARD OF REGENTS, STATE OF IOWA, AS THE BOARD OF TRUSTEES
OF THE UNIVERSITY OF IOWA HOSPITALS AND CLINICS

November 8-9, 2006
Ames, Iowa

I. Introductory Comments
   Regent Robert N. Downer, Chair
   Donna Katen-Bahensky, Director and Chief Executive Officer

II. Recap of 10/18/06 UIHC Committee Meeting
    - Quality and Safety at UIHC
    - Operational Improvement
    Donna Katen-Bahensky

III. Operating and Financial Performance Report
      Donna Katen-Bahensky
      Anthony DeFurio, Chief Financial Officer

IV. IowaCare Update
    Donna Katen-Bahensky
    Stacey Cyphert, Special Advisor to the President,
    Special Advisor to the Dean of CCOM,
    Senior Assistant Hospital Director

V. Director’s Report
   Donna Katen-Bahensky
Quality and Safety at UIHC: Principles and Practices

Donna Katen-Bahensky
Director and Chief Executive Officer
Quality and Safety at UIHC

• Why is Public Reporting Important?
  – It’s the right thing to do.
  – The public wants and needs healthcare information.
  – Sooner or later financial reimbursement will be linked to quality and safety.

• History of Public Reporting of Quality:

  - HEDIS: Health Plan Employer Data and Information Set
  - JCAHO- Joint Commission of Accreditation of Healthcare Organizations
  - CMS- Centers for Medicare and Medicaid Services
Public Report Cards

• UIHC Guiding Principles
  – We are committed to sharing information publicly through reliable local, state and national Report Cards that will help improve the quality and safety of our patient services.
  – We are committed to using information from reliable Report Cards to identify opportunities for improvement and to guide continuous performance improvement efforts in safety and quality of patient care.

• UIHC Conclusions
  – We believe the public and providers are best served by hospital Report Cards using quality/safety information:
    • that is understandable, focused and relevant to user groups, from individual members of the public to individual hospitals.
    • that is derived from clinical data (e.g., patient records) rather than from administrative data (e.g., financial forms).
    • that is derived using explicit methodology to verify and risk-adjust data.
    • that may be directly applied by providers to improve processes of care.
Report Cards Used by UIHC

<table>
<thead>
<tr>
<th>Peer Group</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>• US Hospitals</td>
<td>• Hospital Compare (CMS) and JCAHO</td>
</tr>
<tr>
<td>• Academic Health Centers</td>
<td>• University HealthSystem Consortium</td>
</tr>
<tr>
<td>• Neonatal Intensive Care Units</td>
<td>• Vermont-Oxford Network</td>
</tr>
<tr>
<td>• Magnet Hospitals</td>
<td>• American Nurses Credentialing Center</td>
</tr>
<tr>
<td>• Cardiac Surgery Centers</td>
<td>• Society of Thoracic Surgeons</td>
</tr>
<tr>
<td>• Iowa Hospitals</td>
<td>• Iowa Healthcare Collaborative</td>
</tr>
</tbody>
</table>

Iowa Healthcare Collaborative (IHC)

• Partnership between the Iowa Hospital Association (IHA) and the Iowa Medical Society (IMS)

• Purpose- promote culture of performance improvement for Iowa healthcare

• Annual report
JCAHO/CMS and Hospital Compare

• JCAHO/CMS Quality Measures
  – Population specific measure sets
    • Acute myocardial infarction - 9 measures
    • Heart failure - 4 measures
    • Pneumonia - 11 measures
    • Pregnancy and related conditions - 3 measures
    • Surgical Care Improvement Project - 6 measures
  – Found on JCAHO and CMS websites

• Hospital Compare Website (http://www.hospitalcompare.hhs.gov)
  – Consumer-oriented display of core measures:
    • AMI - acute myocardial infarction
    • HF - heart failure
    • PN - pneumonia measures (community-acquired)
    • SIP - surgical infection prevention
  – Rolling year’s worth of data
What is Our Role?

- Understand and practice evidence-based care – the right thing to do
- Be aware of the metrics, recognizing that they measure how well we are performing and documenting evidence-based care
- Know and understand the source and limitations of the data
- Set and review priorities on an ongoing basis through the UIHC’s University Hospital Advisory Committee
- Identify when problems exist and work to address them – performance improvement is ongoing
- Managers and providers review reports with staff at least quarterly
UIHC’s Hospital Safety Program

• Culture of Safety
  – We assume all UIHC healthcare workers attempt to deliver safe and effective patient care
  – Most incidents resulting in harm can be traced back to complex systems factors
  – Blaming people doesn’t improve the system
  – Front line staff are able to report and recognize errors or near misses without fear of retaliation
  – Enhancing patient safety requires creating a culture in which openness and learning are valued

• FY 2007 Safety Program Goals
  – Establish incident and ad hoc health care infection review team
  – Evaluate UHC incident reporting system (Patient Safety Net)
  – Conduct Safety Walk Rounds Pilot
  – Support the development of publicly reported patient safety metrics
Safety Initiatives at UIHC

• Multidisciplinary Incident Investigation Team (MIIT)
  – Weekly review all incident and “near miss” reports
  – Improve consistency and timeliness of follow-up
  – Identify system-based causes and select opportunities for improvement
  – Provide meaningful feedback about lessons learned to care givers

• Ad Hoc Operations Committee on Health Care Infection
  – 8-member committee which meets as needed to evaluate sensitive issues related to health care infections

• Safety Walk Rounds (Pilot)
  – Provide an informal venue for front line staff to discuss safety issues in the organization
  – Show leadership commitment to creating a culture of safety
Safety Initiatives at UIHC (cont’d)

- University HealthSystem Consortium Patient Safety Net (Pilot)
  - Web-based event reporting system with e-mail notification capability
  - Captures patient, visitor, and service events
- Agency for Healthcare Research and Quality (AHRQ) Quality Indicators Validation Pilot
  - Purpose of project:
    - Gather scientific evidence on indicators
    - Learn how to better interpret metrics
    - Evaluate need for refinement to metrics
  - UIHC applied for participation in August 2006
  - UIHC was notified in September 2006 of selection as a partner for this project
  - Project will begin in October/November 2006
Operations Improvement at UIHC

Donna Katen-Bahensky
Director and Chief Executive Officer
Operations Improvement at UIHC

• Continuous Improvement is a philosophy

• Transformation is a Multi-step, Multi-year Journey
  – **Stabilize** operations to generate real productivity, quality, and service improvements
  – **Create** operational excellence necessary to deliver distinctive service
  – **Leverage** these distinctive services to elevate price and/or volume and extend service offerings based on operational competencies

• Continuous Improvement Process
  – Identify best practices, waste, and opportunities for improvement
    • **Value-add**ing activity: transforms product, information or service to meet customer (patient) requirements
    • **Non-value adding** activity: takes time, resources or space, but adds no value from the patient’s perspective
Lean and Kaizen

• What is “Lean?”
  – “A philosophy of continuous improvement based on setting standards aimed at eliminating waste through participation of all employees.”

• What is “Kaizen?”
  – Comprised of the Japanese words meaning “change” and “better”
  – Typically, kaizen is thought of in terms of “events” which are focused on rapid improvement by breaking down a process, removing waste, and implementing the improved process as the new standard.
History of Lean/Kaizen at UIHC

• First Kaizen event conducted at UIHC in June of 2004 in conjunction with Iowa Business Council

• Participants
  – UIHC faculty and staff
  – College of Public Health
  – Iowa Department of Public Health
  – Pella Corporation
  – Maytag Corporation
  – TBM Consulting Group

• Focus Area
  – Radiology, Computed Tomography (CT) Scans

• Accomplishments
  – Wait time – decreased from 1’ 54” to 1’ 16” (33% reduction)
  – Throughput – increased from 64 to 84 patients per day (31% increase)
History of Lean/Kaizen at UIHC (cont’d)

• UIHC Office of Operational Improvement established in July of 2005
• Subsequent projects have included:
  – Central Sterilizing Services/Urology – Implement Kanban* System
  – Pharmacy (6RC) – Medication Turnaround Time
  – Emergency Trauma Center – Wait Time, Length of Stay
  – Infusion Suite – Pharmacy Interface
  – Internal/Family Medicine Inpatient (6RC) – Admission Planning, Discharge Planning, Length of Stay
  – GI Clinic – Wait Time, Length of Stay, Capacity for Additional Procedures
  – Ambulatory Standards of Excellence
  – Cancer Center Clinics – Flow, Wait Time, Length of Stay

* Stocking system using signals to make production systems respond to real needs and not predictions and forecasts.
Kaizen Project Selection Criteria

• Voice of the Customer
  – Patients and families
  – Internal customers (MDs, staff)

• Feasibility from a resource and data standpoint

• Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

• Tied to the mission and vision

• SMART Goals – tied to strategic initiatives
  
  S = Specific  
  M = Measurable  
  A = Attainable  
  R = Realistic  
  T = Timely
Example: Holden Comprehensive Cancer Center
Infusion Suite Results Achieved

<table>
<thead>
<tr>
<th>Goal</th>
<th>Before</th>
<th>After</th>
<th>% Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce patient wait time by 30%</td>
<td>32 mins.</td>
<td>10 mins.</td>
<td>69% reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Significant reduction variation</td>
</tr>
<tr>
<td>Reduce overall LOS by 10% w/ same resources</td>
<td>235 mins.</td>
<td>186 mins.</td>
<td>21% reduction</td>
</tr>
<tr>
<td>Increase throughput by 10%</td>
<td>42 pts/day (at peak)</td>
<td>68 pts/day (at peak)</td>
<td>38% potential increase</td>
</tr>
<tr>
<td>Reduce staff distance by 50%</td>
<td>- RN-900 ft.</td>
<td>- RN-90 ft.</td>
<td>- RN- 6.1 miles per day</td>
</tr>
<tr>
<td></td>
<td>- Clinic NA 230 ft.</td>
<td>- Clinic NA 0 ft.</td>
<td>- NA up 1.8 miles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Clinic NA 100%</td>
</tr>
</tbody>
</table>
FY 2006-2007 Operational Improvement Project Requests

- 22 departmental requests submitted for review
- The following have been granted priority status:

<table>
<thead>
<tr>
<th>AREA</th>
<th>PROJECT</th>
<th>CHAMPION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho/Radiology Clinic</td>
<td>Patient Flow</td>
<td>Dr. Johnston, Janet Roe</td>
</tr>
<tr>
<td>Central Sterilizing Services/Gynecology</td>
<td>Set-up Kanban System</td>
<td>T. Shuff</td>
</tr>
<tr>
<td>Central Sterilizing Services/Transplantation</td>
<td>Set-up Kanban System</td>
<td>T. Shuff</td>
</tr>
<tr>
<td>Vascular Service-GSG</td>
<td>Patient Flow, Wait Time</td>
<td>Dr. Jamal Hobballah</td>
</tr>
<tr>
<td>Material Services</td>
<td>Material Handling and Safety</td>
<td>T. Gaillard</td>
</tr>
<tr>
<td>GI Clinic</td>
<td>Patient Flow, Wait Time</td>
<td>Dr. Summers, Dr. Field</td>
</tr>
<tr>
<td>Emergency Trauma Center</td>
<td>Wait Time, Length of Stay</td>
<td>Dr. Dickson</td>
</tr>
<tr>
<td>Allergy Immunotherapy</td>
<td>Shot Line Process – Length of Stay, WT, Non-value-added Steps, Distance Traveled</td>
<td>Keri Semrau</td>
</tr>
<tr>
<td>Cardiothoracic Surgery</td>
<td>Process Improvement, Length of Stay</td>
<td>Dr. Iannettoni</td>
</tr>
</tbody>
</table>
Operating and Financial Performance
Year-to-Date September 2006

Donna Katen-Bahensky
Director and Chief Executive Officer

Anthony DeFurio
Chief Financial Officer
### Volume Indicators
#### July 2006 through September 2006

<table>
<thead>
<tr>
<th>Operating Review (YTD)</th>
<th>Actual</th>
<th>Budget</th>
<th>Prior Year</th>
<th>Variance to Budget</th>
<th>% Variance to Budget</th>
<th>Variance to Prior Year</th>
<th>% Variance to Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>6,929</td>
<td>6,585</td>
<td>6,431</td>
<td>344</td>
<td>5.2%</td>
<td>498</td>
<td>7.7%</td>
</tr>
<tr>
<td>Patient Days</td>
<td>46,113</td>
<td>42,437</td>
<td>44,039</td>
<td>3,676</td>
<td>8.7%</td>
<td>2,074</td>
<td>4.7%</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>6.66</td>
<td>6.44</td>
<td>6.85</td>
<td>0.22</td>
<td>3.3%</td>
<td>(0.19)</td>
<td>-2.8%</td>
</tr>
<tr>
<td>Average Daily Census</td>
<td>501.23</td>
<td>461.27</td>
<td>478.68</td>
<td>39.96</td>
<td>8.7%</td>
<td>22.55</td>
<td>4.7%</td>
</tr>
<tr>
<td>Surgeries - Inpatient</td>
<td>2,648</td>
<td>2,664</td>
<td>2,612</td>
<td>(16)</td>
<td>-0.6%</td>
<td>36</td>
<td>1.4%</td>
</tr>
<tr>
<td>Surgeries - Outpatient</td>
<td>2,729</td>
<td>2,765</td>
<td>2,711</td>
<td>(36)</td>
<td>-1.3%</td>
<td>18</td>
<td>0.7%</td>
</tr>
<tr>
<td>Emergency Treatment Center Visits</td>
<td>9,826</td>
<td>9,127</td>
<td>8,885</td>
<td>699</td>
<td>7.7%</td>
<td>941</td>
<td>10.6%</td>
</tr>
<tr>
<td>Outpatient Clinic Visits</td>
<td>167,596</td>
<td>165,020</td>
<td>165,627</td>
<td>2,576</td>
<td>1.6%</td>
<td>1,969</td>
<td>1.2%</td>
</tr>
<tr>
<td>Case Mix</td>
<td>1.7236</td>
<td>1.7360</td>
<td>1.7549</td>
<td>(0.0124)</td>
<td>-0.7%</td>
<td>(0.0313)</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Medicare Case Mix</td>
<td>1.8292</td>
<td>1.8797</td>
<td>1.9357</td>
<td>(0.0505)</td>
<td>-2.7%</td>
<td>(0.1065)</td>
<td>-5.5%</td>
</tr>
</tbody>
</table>

- **Greater than 2.5% Favorable**
- **Neutral**
- **Greater than 2.5% Unfavorable**
## Comparative Financial Results
### July 2006 through September 2006

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Budget</th>
<th>Prior Year</th>
<th>Variance to Budget</th>
<th>Variance to Prior Year</th>
<th>Variance to Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET REVENUES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Revenue</td>
<td>$180,072</td>
<td>$178,841</td>
<td>$164,916</td>
<td>$1,231</td>
<td>0.7%</td>
<td>$15,156</td>
</tr>
<tr>
<td>Appropriations</td>
<td>3,352</td>
<td>3,352</td>
<td>3,352</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>9,631</td>
<td>9,909</td>
<td>10,663</td>
<td>(278)</td>
<td>-2.8%</td>
<td>(1,032)</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$193,055</td>
<td>$192,102</td>
<td>$178,931</td>
<td>$953</td>
<td>0.5%</td>
<td>$14,124</td>
</tr>
<tr>
<td><strong>EXPENSES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>$98,748</td>
<td>$98,529</td>
<td>$90,578</td>
<td>$219</td>
<td>0.2%</td>
<td>$8,170</td>
</tr>
<tr>
<td>General Expenses</td>
<td>72,298</td>
<td>73,731</td>
<td>69,381</td>
<td>(1,433)</td>
<td>-1.9%</td>
<td>2,917</td>
</tr>
<tr>
<td>Operating Expense before Capital</td>
<td>171,046</td>
<td>172,260</td>
<td>159,959</td>
<td>(1,214)</td>
<td>-0.7%</td>
<td>11,087</td>
</tr>
<tr>
<td>Earnings Before Depreciation, Interest, and Amortization (EBDITA)</td>
<td>$22,009</td>
<td>19,842</td>
<td>18,972</td>
<td>2,167</td>
<td>10.9%</td>
<td>3,037</td>
</tr>
<tr>
<td>Capital- Depreciation and Amortization</td>
<td>13,514</td>
<td>13,566</td>
<td>12,942</td>
<td>(52)</td>
<td>-0.4%</td>
<td>572</td>
</tr>
<tr>
<td><strong>Total Operating Expense</strong></td>
<td>$184,560</td>
<td>$185,826</td>
<td>$172,901</td>
<td>($1,266)</td>
<td>-0.7%</td>
<td>$11,659</td>
</tr>
<tr>
<td>Operating Income</td>
<td>$8,495</td>
<td>$6,276</td>
<td>$6,030</td>
<td>$2,219</td>
<td>35.4%</td>
<td>$2,465</td>
</tr>
<tr>
<td>Operating Margin %</td>
<td>4.4%</td>
<td>3.3%</td>
<td>3.4%</td>
<td>1.1%</td>
<td>33.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Gain (Loss) on Investments</td>
<td>4,581</td>
<td>2,451</td>
<td>2,913</td>
<td>2,130</td>
<td>86.9%</td>
<td>1,668</td>
</tr>
<tr>
<td>Non-Recurring Items</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>13,076</td>
<td>8,727</td>
<td>8,943</td>
<td>4,349</td>
<td>49.8%</td>
<td>4,133</td>
</tr>
<tr>
<td><strong>Net Margin %</strong></td>
<td>6.6%</td>
<td>4.5%</td>
<td>4.9%</td>
<td>2.1%</td>
<td>31.8%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

**NOTE:** all dollar amounts are in thousands
Comparative Accounts Receivable at September 30, 2006

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Accounts Receivable</td>
<td>$93,964,049</td>
<td>$95,976,921</td>
<td>$97,592,712</td>
</tr>
<tr>
<td>Net Days in AR</td>
<td>57</td>
<td>51</td>
<td>51</td>
</tr>
</tbody>
</table>

Days of Revenue in Net A/R

Bad Debts

* unaudited
IowaCare Update

Stacey Cyphert

Special Advisor to the President,
Special Advisor to the Dean of CCOM,
Senior Assistant Hospital Director
IowaCare & Chronic Care Enrollment (net of disenrollments)
IowaCare Volume at UI Hospitals and Clinics Remains Brisk

- Net enrollment in IowaCare and Chronic Care has been declining throughout FY 07 from a peak at the end of June 2006.

- DHS believes, “that much of the decline has to do with the reapplication process, and that the citizen documentation is likely lengthening the time it takes to get re-enrolled.”

- It is unknown at this time the extent to which this decline will continue or if it will impact patient care volume at the UI Hospitals and Clinics.

- FY 07 data through October 1, 2006 shows the UI Hospitals and Clinics has already seen over 4,100 unique IowaCare or Chronic Care patients who have made over 12,000 visits.

- An average of 151 IowaCare patients per week are being transported to and from the UI Hospitals and Clinics on our vans and we have already logged over 149,000 miles in FY 07.
4,102 Unique IowaCare & Chronic Care Patients Have Been Seen at the UIHC Between July 1 and September 30, 2006

These patients account for 12,384 visits.

Total includes patients whose residence appears to be outside Iowa. It also includes patients for whom a claim has not yet been submitted to DHS.
Nurse Helpline Agreement Signed

- An agreement whereby the UI Hospitals and Clinics will be paid to provide Nurse Helpline Services for the enrolled IowaCare population has been reached.
  - The goal of the nurse helpline initiative is to assist enrolled IowaCare population members in making appropriate choices about the use of emergency room and other health care services.
  - Operational questions pertaining to IowaCare are not part of the agreement and will be directed to the Department of Human Services.
  - The Nurse Helpline became operational October 2, 2006.
  - Over 500 calls were received in the first week.
  - Toll free number for the helpline is 866-890-5966.
  - The website address is: https://www.uihealthcare.com/appts/ptselfreferform.htm
UI Hospitals and Clinics’ Pilot Pharmaceutical and Durable Medical Equipment Programs Are Serving Patients

• August 14, 2006, the UIHC implemented pilot programs sans reimbursement to facilitate IowaCare beneficiary access to pharmaceuticals and durable medical equipment.

• Through October 6, 2006:
  – Over 12,000 prescriptions have been filled at a cost of approximately $255,000.
  – DME has been provided at a cost in excess of $25,000.
Director’s Remarks

Donna Katen-Bahensky
Director and Chief Executive Officer
Director’s Report

I. Rating Hospital Heart Care (Gannett)

II. Edge of Excellence Award

III. Hospital Security Protocol During Football Games

IV. Recruitment

V. Other
Rating Hospital Heart Care – Gannett (cont’d)

Special report: Rating Hospital Heart Care
SEARCHABLE DATABASE

Understanding this database

Gannett News Service analyzed information about thousands of hospitals to help you determine which hospitals in your area are most likely to provide the most effective treatments for heart attacks and heart failure.

Click the arrows below to find out more about the methodology that was used to compile this database.

- What we measured
- How we measured it
- How we came up with star ratings
- What period of time we looked at
- Where we got the data
- Where we got information about hospitals’ characteristics and home counties

Percent of time heart attack patients got recommended care: 98
National Rank: ★★★★★
Within-State Rank: ★★★★★
National Median: 91 Percent
State Median: 94 Percent

Percent of time heart failure patients got recommended care: 87
National Rank: ★★★★★
Within-State Rank: ★★★★★
National Median: 74 Percent
State Median: 76 Percent
Edge of Excellence Awards

• Business Growth
  – Businesses that are unique and successful in the way they handled growth or change over the past year. Recognizes companies that have experienced and handled exceptional growth in sales and employment during the past year.

• Best Place to Work
  – Businesses that encourage education and development for their employees, a positive and productive work environment and industry-leading employee benefits. Recognizes companies as the best places to work that exemplify best practices in attracting and retaining valuable employees.

• Community Service
  – Businesses investing in the community through volunteerism, cash contributions and support of non-profit organizations and community activities. Recognizes companies that exhibit outstanding community stewardship and public citizen practices throughout their organization.
Hospital Security Protocol

• Beginning August 1, 2006, the UI Hospitals and Clinics Access Control procedures were expanded to include screening of all persons entering the hospital after hours.

• Between 9:00 PM and 6:00 AM, patients, visitors, and staff without a valid UI Hospitals and Clinics photo ID badge, are now required to enter through the Main Entrance. Safety and Security staff stationed at that location screen everyone entering the facility during this timeframe.

• As of September 30, 2006 this protocol was extended to include tighter access restrictions during home football games.

• For home football game weekends, the facility is locked down at 9:00 p.m. the Friday beforehand, and access restrictions remain in place until 6:00 a.m. Sunday morning.