University of Iowa Health Care

Presentation to

The Board of Regents, State of Iowa

April 18, 2019
Opening Remarks
Operating and Financial Performance
Preliminary FY20 Operating Budget
Faculty Presentation
Opening Remarks

Brooks Jackson, MD, MBA
Vice President for Medical Affairs
& Dean, Carver College of Medicine
Match Day 2019 Results
University of Iowa Carver College of Medicine

136 Students Participating

- 59% Other Specialties
- 10% Family Medicine
- 12% Pediatrics
- 17% Internal Medicine
- 2% Obstetrics & Gynecology

41% Entering Primary Care Specialties

52% The number of CCOM medical students staying in Iowa for residency increased 52% over last year.

Most Popular Training States

- 35% Iowa (33 UI Hospitals & Clinics)
- 11 California
- 10 Illinois
- 7 Wisconsin

Top Specialties

1. Internal Medicine
2. Pediatrics
3. Family Medicine
4. Orthopedic Surgery
5. Emergency Medicine
UI Carver College of Medicine Rankings
U.S. News & World Report Rankings

The University of Iowa Carver College of Medicine ranked once again among the nation’s best graduate schools

1st Physician Assistant Masters Program

6th Physical Therapy, Masters and Doctorate Program

19th Family Medicine

22nd Internal Medicine

26th Primary Care

38th Research
Comparing last year to this year – Research
Weighted Measures of U.S. News & World Report Research Rankings

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2019 Weight</th>
<th>2020 Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Peer Assess</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Residency Director</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Student Selectivity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median MCAT Score</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Median Undergraduate GPA</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Acceptance Rate</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Faculty Resource</strong></td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Research Activity</strong></td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Total NIH Funding</td>
<td>15%</td>
<td>25%</td>
</tr>
<tr>
<td>Average NIH Funding/Faculty</td>
<td>15%</td>
<td>15%</td>
</tr>
</tbody>
</table>
### Comparing previous years – Research

*U.S. News & World Report* Rankings

<table>
<thead>
<tr>
<th>Year</th>
<th><em>U.S. News</em> rank</th>
<th>Peer Assess score</th>
<th>Res. Dir. score</th>
<th>Average MCAT</th>
<th>Average GPA</th>
<th>Accept rate</th>
<th>NIH grants (in millions)</th>
<th>NIH grant/faculty (in thousands)</th>
<th>Faculty to student ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>38</td>
<td>3.6</td>
<td>3.7</td>
<td>512</td>
<td>3.77</td>
<td>7.2%</td>
<td>$131.4</td>
<td>$111.7</td>
<td>2:1</td>
</tr>
<tr>
<td>2018</td>
<td>32</td>
<td>3.6</td>
<td>3.6</td>
<td>511</td>
<td>3.80</td>
<td>7.7%</td>
<td>$104.7</td>
<td>$102.5</td>
<td>1.7:1</td>
</tr>
</tbody>
</table>

- **Favorable**
- **No Change**
- **Unfavorable**

*U.S. News & World Report* ranks the year ahead, so 2019 numbers are for the 2020 ranking.
Comparing previous years – Primary Care

U.S. News & World Report Rankings

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. News rank</th>
<th>Peer Assess score</th>
<th>Res. Dir. score</th>
<th>Average MCAT</th>
<th>Average GPA</th>
<th>Accept rate</th>
<th>Primary Care Rate</th>
<th>Faculty to student ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>26</td>
<td>3.5</td>
<td>3.8</td>
<td>512</td>
<td>3.77</td>
<td>7.2%</td>
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</tr>
</tbody>
</table>

Favorable ☢ No Change ○ Unfavorable

*U.S. News & World Report* ranks the year ahead, so 2019 numbers are for the 2020 ranking.
Operating and Financial Performance

Bradley Haws, MBA
Associate Vice President for Finance & Chief Financial Officer, UI Health Care

Suresh Gunasekaran, MBA
Associate Vice President, UI Health Care and CEO, UI Hospitals & Clinics
Volume and Financial Highlights – FY19
Through February 2019

Operating Margin
- February year-to-date actual 5.5%, budget of 2.4%

Volume Change
- Year-over-year:
  - Acute Discharges -1.8%, Patient Days 4.0%, Surgeries 5.4%, Clinic Visits 3.2%

Acuity
- Case Mix Index continues to be high – above 2.0 for all payers 2.19 and Medicare 2.22

Census
- Many days above 90% occupancy
- Closer relationship with post-acute providers being developed

Length of Stay Index
- Adult at .94 – below the expected index of 1.0
- Pediatrics at 1.03 – at the expected index

Readmission Rates
- Adult at 10.62% - below target of 11.96%
- Pediatrics at 10.50% - above target of 8.29%
  - Patients with multiple comorbidities and chronic illness

Revenues
- 4.0% above budget year-to-date

Payer Mix
- Medicare flat
- FY18: 37.3%, FY19: 37.2%

Accounts Receivable
- Positive trend for government and out-of-state payers
- Progress resolving older cases

Salary Expenses
- 2.7% below budget year-to-date

Non Salary Expenses
- 3.9% above budget year-to-date
- Implant and pharmacy costs
Surgical Volume Growth

Operating and Financial Performance

- Surgical volumes continue to grow year-over-year
  - FY17 3.6% (IP .9%, OP 6.2%)
  - FY18 3.5% (IP 6.8%, OP .5%)
  - FY19 5.4% (IP 5.3%, OP 5.5%)

- Demand for Orthopedics continues to stay strong (up 8.9% YOY)

- ORs are very busy
  - OR Utilization 88.4% in Main OR
    77.5% ASC, 75.2% SFCH

<table>
<thead>
<tr>
<th>Service</th>
<th>Main OR Block Utilization</th>
<th>ASC Block Utilization</th>
<th>SFCH Block Utilization</th>
<th>Combined Block Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentistry</td>
<td>87.9%</td>
<td>81.9%</td>
<td>83.9%</td>
<td>83.8%</td>
</tr>
<tr>
<td>Gynecology</td>
<td>96.4%</td>
<td>63.6%</td>
<td>n/a</td>
<td>91.3%</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>100.2%</td>
<td>70.8%</td>
<td>56.2%</td>
<td>94.8%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>72.1%</td>
<td>86.0%</td>
<td>50.7%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>92.9%</td>
<td>86.4%</td>
<td>91.0%</td>
<td>90.7%</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>85.6%</td>
<td>46.2%</td>
<td>89.1%</td>
<td>84.7%</td>
</tr>
<tr>
<td>Surgery</td>
<td>82.7%</td>
<td>61.4%</td>
<td>66.2%</td>
<td>78.3%</td>
</tr>
<tr>
<td>Urology</td>
<td>90.7%</td>
<td>59.2%</td>
<td>84.6%</td>
<td>84.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88.4%</strong></td>
<td><strong>77.5%</strong></td>
<td><strong>75.6%</strong></td>
<td><strong>84.7%</strong></td>
</tr>
</tbody>
</table>
Commitment to Efficiency
Right Care at the Right Place
UI QuickCare, Urgent Care, and Emergency Care

UI QuickCare
If your primary care provider isn’t available, UI QuickCare treats patients with minor illnesses and injuries.

Common UI QuickCare/Urgent Care Problems:
- Cough, Cold, Sore Throat
- Fever/Flu
- Earaches
- Eye Infections
- Bladder Infections
- Diarrhea/Nausea/Vomiting
- Rash
- Insect Bites
- Minor Burns
- Seasonal Allergies

Urgent Care
Urgent Care treats more conditions than UI QuickCare, including minor injuries requiring X-rays, and can place stitches and administer IV fluids.

In addition, Urgent Care can treat:
- Broken Bones
- Sprains/Strains
- Cuts/Scrapes
- Dehydration

Extended Hours
Urgent Care has extended hours, offering a way to receive care during evenings and weekends. Urgent Care is also open most holidays with reduced hours.

Emergency Room
Go to the emergency room if you have a serious or life-threatening condition.

Common Emergency Room Problems:
- Head Injury
- Stroke
- Severe Bleeding
- Chest Pain
- Abdominal Pain
- Difficulty Breathing
- Severe Pain
- Newborn Fever
- Major Trauma
- Suicidal Thoughts

Call 911
If a person could die or become permanently disabled, it is an emergency. Call 911 to have the emergency team come to you if you can’t wait.
Urgent Care Impact
UI QuickCare, Urgent Care, and Emergency Care

FY18 Q1 and Q2 vs. FY19 Q1 and Q2
Urgent Care Impact on Emergency Visits

<table>
<thead>
<tr>
<th>Acuity 1 and 2 (highest acuity)</th>
<th>Acuity 3, 4, and 5 (lower acuity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2018</td>
<td>FY2019</td>
</tr>
<tr>
<td>20,784</td>
<td>18,376</td>
</tr>
<tr>
<td>9,138</td>
<td>9,669</td>
</tr>
</tbody>
</table>

Arrival Method
Ground Ambulance
Private Vehicle/Walk-In

Year-over-Year Difference
84
-1,915

FY17, FY18 and Annualized FY19
Urgent Care, QuickCare, and Emergency Volumes

<table>
<thead>
<tr>
<th>Year</th>
<th>Urgent Care/QuickCare</th>
<th>Emergency Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2017</td>
<td>122,793</td>
<td>119,252</td>
</tr>
<tr>
<td>FY2018</td>
<td>119,252</td>
<td>122,250</td>
</tr>
<tr>
<td>FY2019</td>
<td>122,250</td>
<td></td>
</tr>
<tr>
<td>Percent Change</td>
<td>-2.88%</td>
<td>2.51%</td>
</tr>
</tbody>
</table>
Emergency Room Waiting
UI QuickCare, Urgent Care, and Emergency Care

Average Wait Time from Check-In to Room
July 2018 – February 2019

2019 Adult ED Psych Boarding and Overall Adult LWBS* Average Emergency Department Boarding Hours and Left Without Being Seen Rate

Adult Psych Transfers from Emergency Department to Outside Facility
Commitment to Quality
Patient Survey Results: Communication

Commitment to Quality

Inpatient Adult: HCAHPS Doctors Domain. Percent of ALWAYS for Last 12 Quarters with Current Quarter to Date.

Provider Communication Workshop Pilot Began

42nd Percentile
N=474

80.3
Needed for CMS FY19 Domain Threshold

Inpatient Adult: HCAHPS Nurses Domain. Percent of ALWAYS for Last 12 Quarters with Current Quarter to Date.

C3 Sessions Begin

45th Percentile
N=475

78.7
Needed for CMS FY19 Domain Threshold
Surgical Site Infection Standardized Infection Ratio

Commitment to Quality

Surgical site infection prevention measures currently in progress:

- Optimization of perioperative antibiotic prophylaxis
- Skin preparation
- Perioperative normothermia
- Prevention of perioperative hyperglycemia
- Individual surgeon SSI rate feedback

Surgical Site Infections (CMS Reported)

Abdominal Hysterectomy

Colon Surgery

Graphs show quarter-to-date and year-to-date results as applicable.

Note: Superficial infections excluded

+ Insufficient data to compute
Financial Performance
## Comparative Financial Results

### Fiscal Year to Date February 2019, Dollars in Thousands

<table>
<thead>
<tr>
<th>NET REVENUES</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>Patient Revenue</td>
<td>$1,164,630</td>
<td>$1,117,874</td>
<td>$1,053,493</td>
<td>$46,756</td>
<td>4.2%</td>
<td>$111,137</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>34,248</td>
<td>35,128</td>
<td>33,812</td>
<td>(880)</td>
<td>-2.5%</td>
<td>436</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$1,198,878</strong></td>
<td><strong>$1,153,002</strong></td>
<td><strong>$1,087,305</strong></td>
<td><strong>$45,876</strong></td>
<td><strong>4.0%</strong></td>
<td><strong>$111,573</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPENSES</th>
<th>Actual</th>
<th>Budget</th>
<th>Variance to Budget</th>
<th>Variance to Prior Year</th>
<th>Variance to Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$523,256</td>
<td>$538,045</td>
<td>($14,789)</td>
<td>-2.7%</td>
<td>$9,960</td>
</tr>
<tr>
<td>General Expenses</td>
<td>542,142</td>
<td>521,615</td>
<td>20,527</td>
<td>3.9%</td>
<td>59,284</td>
</tr>
<tr>
<td>Operating Expense before Capital</td>
<td>$1,065,398</td>
<td>$1,059,660</td>
<td>$996,154</td>
<td>$5,738</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Cash Flow Operating Margin</strong></td>
<td><strong>$133,480</strong></td>
<td><strong>$93,342</strong></td>
<td><strong>$40,138</strong></td>
<td><strong>43.0%</strong></td>
<td><strong>$42,329</strong></td>
</tr>
<tr>
<td>Capital- Depreciation and Amortization</td>
<td>67,367</td>
<td>65,938</td>
<td>1,429</td>
<td>2.2%</td>
<td>(354)</td>
</tr>
<tr>
<td><strong>Total Operating Expense</strong></td>
<td><strong>$1,132,765</strong></td>
<td><strong>$1,125,598</strong></td>
<td><strong>$1,063,875</strong></td>
<td><strong>$7,167</strong></td>
<td><strong>0.6%</strong></td>
</tr>
</tbody>
</table>

| Operating Income | $66,113 | $27,404 | $23,430 | $38,709 | 141.3% | $42,683 | 182.2% |
| Operating Margin % | 5.5% | 2.4% | 2.2% | 3.1% | 3.3% |
| Gain (Loss) on Investments | 11,811 | 12,689 | 26,938 | (878) | -6.9% | (15,127) | -56.2% |
| Other Non-Operating | (7,878) | (7,871) | (8,444) | (7) | -0.1% | 566 | 6.7% |
| **Net Income** | **70,046** | **$32,222** | **$41,924** | **$37,824** | **117.4%** | **$28,122** | **67.1%** |
| Net Margin % | 5.8% | 2.8% | 3.8% | 3.0% | 2.0% |

*Gain/(Loss) on Investments based on information available at close. Final investment return for this period is reflected in Fiscal Year to Date returns in the subsequent reporting cycle.
## Key Metrics

### Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>FY19 YTD Through February</th>
<th>Moody’s Median</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Margin</td>
<td>5.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Financial – Liquidity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days Cash on Hand</td>
<td>194</td>
<td>265</td>
</tr>
<tr>
<td><strong>Financial – Leverage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt to Capitalization</td>
<td>17.8%</td>
<td>27.6%</td>
</tr>
</tbody>
</table>
Why Margin Matters
Since 2010, we are in a new healthcare world.

**Cost Inflation Exceeds Annual Price Inflation**

In the Iowa healthcare marketplace, the annual cost inflation for employees, drugs, equipment and supplies (3-5%) exceeds the annual price inflation from government and commercial payers (1-2%).

**Low Total Growth in Population**

There is little total population growth for Iowans and more Iowans every year are funded by government payers rather than commercial payers (who pay higher prices for services).

**Cumulative Effect**

The cumulative effect of these trends is that even if UIHC sees the same number of patients and provides the same services, **UIHC loses $50-$70M in margin** every year.
How does UIHC Achieve Positive Margin?
Overcoming the $50-70M Challenge

**Growth**
We see more patients in our hospitals, operating rooms, and clinics so that we continue to drive higher revenue.

**New therapies and treatments**
We invest in the latest treatments and therapies as well as world class faculty in order to be the pre-eminent care provider in the state.

**Greater operational efficiencies**
We are focused on getting the maximum throughput and efficiency while maintaining one standard of care for all patients.

**Optimizing payor mix**
We are committed to offering the programs, quality, and convenience necessary for commercial patients to choose UI Health Care.
Capital Investments are Needed
Capital investments are critical to UIHC’s future and maintaining margin

UI Hospitals & Clinics is full
After years of growth, we are now consistently full in both our operating rooms and inpatient beds (over 90%).

UI Hospitals & Clinics buildings are outdated
With the exception of the UI Stead Family Children’s Hospital, all adult patient rooms are in buildings that are between 30-50 years old. Older buildings drive up operating costs and often cannot easily handle the latest technology.

Majority of patient rooms are small and semi-private
These rooms do not meet the patient preference and care models in practice today.

Too much care is delivered on main campus
It is difficult to attract patients when they must travel to the very congested main campus.
## Margin is Too Low To Fund Necessary Capital Plan

### Operating Margin and Capital Plan

<table>
<thead>
<tr>
<th>Capital Needs (in millions)</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Replacement</td>
<td>24.0</td>
<td>29.4</td>
<td>24.5</td>
<td>26.4</td>
<td>29.4</td>
</tr>
<tr>
<td>Infrastructure Replacement</td>
<td>19.1</td>
<td>28.9</td>
<td>24.0</td>
<td>23.1</td>
<td>24.1</td>
</tr>
<tr>
<td>Technology Investment</td>
<td>13.4</td>
<td>11.8</td>
<td>10.5</td>
<td>11.3</td>
<td>14.0</td>
</tr>
<tr>
<td>Inpatient Growth Investment</td>
<td>29.7</td>
<td>80.8</td>
<td>87.9</td>
<td>47.0</td>
<td>32.4</td>
</tr>
<tr>
<td>Outpatient Growth Investment</td>
<td>36.7</td>
<td>38.3</td>
<td>61.5</td>
<td>118.9</td>
<td>51.3</td>
</tr>
<tr>
<td>Facility Replacement</td>
<td>47.1</td>
<td>16.8</td>
<td>19.3</td>
<td>20.1</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>Total Capital Need</strong></td>
<td>170.0</td>
<td>206.1</td>
<td>227.6</td>
<td>246.9</td>
<td>178.0</td>
</tr>
</tbody>
</table>

### Margin + Debt Issuance

<table>
<thead>
<tr>
<th></th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Margin (3.9% each year)</td>
<td>73.7</td>
<td>77.1</td>
<td>80.3</td>
<td>83.6</td>
<td>87.2</td>
</tr>
<tr>
<td>Depreciation and Debt Service</td>
<td>75.4</td>
<td>78.0</td>
<td>85.0</td>
<td>82.5</td>
<td>99.4</td>
</tr>
<tr>
<td>Cash Application from Additional $260M Debt Issuance</td>
<td>45.0</td>
<td>60.0</td>
<td>70.0</td>
<td>85.0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Margin + Debt Issuance</strong></td>
<td>194.1</td>
<td>215.1</td>
<td>235.3</td>
<td>251.1</td>
<td>186.6</td>
</tr>
</tbody>
</table>

### Margin and Debt Issuance vs. Capital Needs

<table>
<thead>
<tr>
<th></th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.1</td>
<td>8.9</td>
<td>7.7</td>
<td>4.3</td>
<td>8.6</td>
<td></td>
</tr>
</tbody>
</table>
Future Concerns
Operating Margin and Capital Plan

- UI Health Care management must continue to balance capital investment and operational performance in order to achieve our tripartite mission.

- In upcoming Board meetings, we will present our vision for continued growth, improved operational efficiencies, and the areas of capital investment that will best drive margin while still promoting one standard of care for patients.

- In the absence of strong margin generation, capital investment will continue to fall and UI Health Care will be unable to maintain its vital clinical, research and teaching programs at present levels and may require additional state support.

- We aim to partner with our communities and manage the health enterprise in order to remain self-sustaining while continuing to serve the burgeoning health care needs of Iowans.
Preliminary FY20 Operating Budget

Bradley Haws, MBA
Associate Vice President for Finance & Chief Financial Officer, UI Health Care

Suresh Gunasekaran, MBA
Associate Vice President, UI Health Care and CEO, UI Hospitals & Clinics
## Preliminary Key Drivers

**UI Health Care Operating Budget FY2020**

### Revenue

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient</td>
<td>2.65%</td>
</tr>
<tr>
<td>Outpatient</td>
<td>5.00%</td>
</tr>
<tr>
<td>Physician Work RVUs</td>
<td>3.00%</td>
</tr>
<tr>
<td>Payor Rate Increase</td>
<td>0.35%</td>
</tr>
<tr>
<td>Charge Increase</td>
<td>6.00%</td>
</tr>
</tbody>
</table>

### Expense

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary Increase Assumptions</td>
<td></td>
</tr>
<tr>
<td>SEIU</td>
<td>2.10%</td>
</tr>
<tr>
<td>Merit</td>
<td>2.10%</td>
</tr>
<tr>
<td>P&amp;S</td>
<td>2.10%</td>
</tr>
<tr>
<td>Faculty</td>
<td>2.00%</td>
</tr>
<tr>
<td>Blended Fringe Benefit Rate</td>
<td>43.71%</td>
</tr>
<tr>
<td>Non-Salary Increase Assumptions</td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td>7.00%</td>
</tr>
<tr>
<td>Supplies</td>
<td>3.00%</td>
</tr>
<tr>
<td>Utilities</td>
<td>2.50%</td>
</tr>
<tr>
<td>Other Non-Salary Expense</td>
<td>2.00%</td>
</tr>
</tbody>
</table>

Preliminary Operating Margin: 3.9%
Hospital Case Mix Index
Action OI Data – CY2018 Quarter 3

70th percentile
Net Operating Revenue per CMI Weighted Adjusted Discharge
Action OI Data – CY2018 Quarter 3

29th percentile
The University of Iowa Hospitals and Clinics is proposing a 6.0% rate increase for FY20.

UIHC charges have an impact on certain prospective contractual rates set by payers. They also directly impact current reimbursement for percent of charge, carve-out and outlier payment terms. The estimated impact of a 6% price increase is a 0.8% yield or $14M.
**Benchmarking**
UIHC charges are low compared to peer institutions.

— In the most recently issued Vizient comparison, UIHC acuity adjusted charges are at the 23rd percentile of Midwest Academic Medical Centers.

— Over the past 6 years, our acuity adjusted charge percentile has decreased from 33\(^{rd}\) percentile to the current 23\(^{rd}\) percentile.

**Self-Pay Impact**
UIHC has a charity care program that shields the medically indigent from being impacted by increases in charges. The program discounts charges for services using a sliding scale based upon the Federal Poverty Limit (adjusted for family size). This program starts at 350% of the FPL.
Chargemaster Price Increase

UI Health Care Operating Budget FY2020

Support requested from the Board of Regents for a 6% rate increase at the University of Iowa Hospital and Clinics effective July 1, 2019.
Faculty Presentation
Improving Immunity Against Malaria

Noah S. Butler, PhD
Associate Professor of Microbiology and Immunology
Malaria Remains a Persistent Global Health Crisis

Improving Immunity Against Malaria

3,850,000,000 220,000,000 440,000
Why haven't we been able to develop a malaria vaccine?

Why don’t people develop resistance to malaria on their own?
Malaria Parasite Life Cycle

Improving Immunity Against Malaria

Research Programs at UI Span the Spectrum of Malarial Disease and Life Cycle Stages

Improving Immunity Against Malaria

Malaria
Host Immune Cells
Why no vaccine? Why no natural resistance to malaria?

Improving Immunity Against Malaria

Three hypotheses being explored in the Butler Lab:

- Failures in immune cell activation
- Lack of immune cell survival
- Deficiencies in immune cell function
Approaches to Address our Hypotheses:
Improving Immunity Against Malaria

- Cutting-edge experimental cellular and molecular immunology
- Sophisticated “big data” genomics approaches
- Powerful collaborations with clinical investigators in the field
  - Dr. Margaret Feeney, UCSF-Uganda
  - Dr. Robert Seder, NIH-Kenya
What are we learning?

Improving Immunity Against Malaria

- Our experiments in the lab reflect observations from human studies
- Identification of genetic and programming circuits that distinctly govern malaria parasite-specific white blood cell function
- Novel opportunities (i.e. “molecular switches”) that can be targeted therapeutically to tip the balance back in favor of the patient
Broader relevance?
Improving Immunity Against Malaria

Deficiencies in immune cell activation during malaria have clear, relevant parallels:

- Chronic viral infections
  - HIV, Hepatitis C

- Cancer
  - Leukemia and lymphoma
Acknowledgements
Improving Immunity Against Malaria

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- Graham Ausdal
- Patrick Schwartzhoff
- Celeste Renfroe

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- Hai-Hui Xue, University of Iowa
- John Harty, University of Iowa
- Maggie Feeney, UCSF
- Robert Seder, NIH

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- University of Iowa Holden Comprehensive Cancer Center
- University of Iowa Carver College of Medicine
- NIH/NIAID