The Reva and David Logan Center For The Arts

Housekeeping Items

• Restrooms
• Exits
• Microphones
• Wifi
UCM Supplier Conference

**Purpose:**

- Orient key supplier leadership to UCM critical business objectives, expectations, and distinct business practices.
- Update on progress and changes from last year’s conference.

*In order to ....*

- Engage suppliers to work continually, passionately and collaboratively to deliver needed improvements.

**Format:**

Presentation with Q&A opportunities
<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
<th>Title</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>Marc Nunn</td>
<td>Assistant Director, Supply Chain Operations</td>
<td>8:30</td>
</tr>
<tr>
<td>Strategic Overview / Network Development</td>
<td>Amy Ross</td>
<td>Vice President, Office of Strategic Planning</td>
<td>8:40</td>
</tr>
<tr>
<td>Strategic Plan Overview</td>
<td>Jason Keeler</td>
<td>Executive Vice President and Chief Operating Officer</td>
<td>8:50</td>
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<tr>
<td>Clinical Focus</td>
<td>Craig Umscheid, M.D., M.S.</td>
<td>Chief Quality and Innovation Officer and VP of Healthcare Delivery Science</td>
<td>9:05</td>
</tr>
<tr>
<td>Executive Q&amp;A</td>
<td></td>
<td>Q&amp;A</td>
<td>9:15</td>
</tr>
<tr>
<td>Break</td>
<td></td>
<td></td>
<td>9:30</td>
</tr>
<tr>
<td>Supply Chain Strategy</td>
<td>Eric Tritch</td>
<td>Vice President, Supply Chain &amp; Logistics</td>
<td>9:45</td>
</tr>
<tr>
<td>Pharmacy Strategy</td>
<td>Kevin Colgan</td>
<td>Chief Pharmacy Officer</td>
<td>10:00</td>
</tr>
<tr>
<td>Clinical Strategic Sourcing &amp; Value Analysis</td>
<td>Ian O’Malley</td>
<td>Director, Strategic Sourcing - Clinical</td>
<td>10:20</td>
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<tr>
<td>Non-Clinical Sourcing Updates</td>
<td>Osvaldo Torres</td>
<td>Director, Strategic Sourcing - Non-Clinical</td>
<td>10:35</td>
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<tr>
<td>Procurement and Supply Chain IT Update</td>
<td>Mike Gordon / Hussam Bachour</td>
<td>Manager, Purchasing / Manager, Supply Chain Systems</td>
<td>10:50</td>
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<tr>
<td>Operations Update</td>
<td>Robert Boyden / Nancy Olmos</td>
<td>Assistant Director, Supply Chain Operations / Assistant Director, Supply Chain Operations</td>
<td>11:05</td>
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<tr>
<td>Ambulatory Transformation</td>
<td>Rob Martin / Mike Fons</td>
<td>Assistant Director, Supply Chain Project Management / Director of Supply Chain, Inghals</td>
<td>11:20</td>
</tr>
<tr>
<td>Diversity Update and Local Impact Awards</td>
<td>David Spence</td>
<td>Assistant Director, Strategic Sourcing</td>
<td>11:35</td>
</tr>
<tr>
<td>Supply Chain Q&amp;A</td>
<td>Eric Tritch</td>
<td>Vice President, Supply Chain &amp; Logistics</td>
<td>11:40</td>
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<tr>
<td>Closing Remarks</td>
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WiFi Information for Logan Center: Wireless Name = Uchicago Guest | Username =06240630@uchicago.edu | Password = 9cyI6
Where We Are Today: The System At a Glance

**FACILITIES**

4 Inpatient Facilities
- Center for Care and Discovery
- Bernard Mitchell Hospital
- Comer Children’s Hospital
- Ingalls Memorial Hospital

1296 Licensed Beds
- 799 Med Surg
- 67 OBGYN
- 169 ICU
- 77 Gen Peds
- 53 NICU
- 78 Acute Mental Illness
- 43 Rehabilitation

46 Operating Rooms

11 Ambulatory Care Facilities
- Duchossois Center for Advanced Care
- 3 in Downtown Chicago
- Orland Park
- Professional Office Building (Harvey)
- 3 Family Care Centers (Calumet City, Flossmoor, and Tinley Park)
- 2 Care Centers (Crestwood and South Holland)

Also: Comprehensive Cancer Center at Silver Cross, Care Network/off-site clinics in Chicago and Suburbs

**VOLUME**

Leading Growth in the Market

45K Admissions

270K Patient Days

28K Surgical Cases

955K Outpatient Encounters

150K Emergency Room Visits

**FINANCIALS**

$1.99B Net Patient Service Revenue

$207M EBIDA

$38.5M Operating Income

**PEOPLE**

11,910 UCM Employees

1,385 Physicians

3,418 Nurses

1,132 Residents & Fellows

Fiscal 2018, unless otherwise noted
Executive Updates

- **Amy Ross** – Vice President, Office of Strategic Planning
- **Jason Keeler** – Executive Vice President and Chief Operating Officer
- **Craig Umscheid, M.D., M.S.** – Chief Quality and Innovation Officer and VP of Healthcare Delivery Science
Strategic Overview

Amy Ross
Vice President, Office of Strategic Planning
Recent Strategic Priorities

Over the past 5 years, UCM has invested heavily in the following growth and geographic expansion strategies:

- **Hospital Partnerships**
  - Focus on providing the right level of care, at the right place, at the right time
  - Create relationships that are complementary; each organization focuses on what they do best

- **Ambulatory Growth**
  - Expansion in select target markets to offer additional access for patients seeking high quality care closer to home

- **Clinically Integrated Network**
  - Development of a clinically integrated network of employed and affiliated physicians as the vehicle for physician alignment and growth
Merging with Ingalls increased UCM’s community based and post-acute care service offerings, enhancing patient access and better positioning the institution for value based care.
UCM Footprint Has Expanded Significantly in Recent Years

Examples of UCM's collaborative relationships with community hospitals include:

- Ingalls/UCM member substitution
- UCM Center for Comprehensive Cancer Care at Silver Cross & LCMH JV
- UCM Pediatric Affiliation with LCMH
- UCM Pediatric Affiliation with Edward/Elmhurst
- Academic affiliation with NorthShore
- Cardiac Surgery program at Riverside Hospital
- UCM Master Affiliation Agreement with Advocate NorthShore Partners

*Does not include department based, single site outreach clinics
We Have Achieved Considerable Success in Recent Years…

However, the landscape is changing and the same factors that enabled our past successes will need to evolve to ensure our future success.
Clinical Strategic Plan Addresses UCM’s Major Challenges

- Proactively respond to rise of consumerism in health care through more convenient patient access points, a differentiated patient experience, and use of digital health tools
- Secure signature program eminence by building market presence and increasing scale and geographic distribution of UCM’s physician network compared to competitors
- Expand ambulatory footprint and asset mix to lead in market shift from inpatient to outpatient environments and reach new markets
- Create additional capacity and more efficient use of current sites to accommodate growth of elective specialty volumes
- Solidify financial position by growing commercial payer mix and establishing a more competitive price point

UCM 2025 Clinical Strategic Plan
Be an eminent academic health system by being *At the Forefront* of discovery, advanced education, clinical innovation, and the delivery of transformative health care.

This vision will be achieved by implementing the following clinical priorities:

**Care Experience**
- Providing the highest quality of care, including through outstanding patient, clinician, and trainee experience
- Apply the latest digital technologies across the care continuum to improve access, experience and value for patients and clinicians
- Improving access to primary care and population health capabilities that impact community health and leverage partners

**Growth**
- Creating a sustainable financial future through growth of highly differentiated clinical services and fostering a culture of continuous improvement and cost efficiency
- Elevating signature clinical programs that integrate discovery and delivery of novel therapies, provide high quality care delivery, and offer innovative clinical trials and training programs
- Expanding the health system, ambulatory, and physician network to make UCM care accessible in new markets

**Value**
- Delivering exceptional value for patient care through highest quality performance with greater cost efficiency
What do we need to do in FY20 to pave the road for the next 5 years?

FY20 is a ramp up year – The focus will be on building the infrastructure to achieve the goals of the UCM 2025 Clinical Strategic Plan

1. Excel in Patient & Clinician Experience
2. Grow Clinical Signature Programs
3. Expand Health System Network
4. Enhance Health of Local Community
5. Deliver High Quality, Cost Effective Care
Differentiation through Digital Health Technologies

Vision: Create a future-ready, digitally enabled organization for patients and clinicians

**Grow Market**
- Attract new customer segments
- Increase downstream referrals
- Add new revenue stream
- Reduce patient leakage

**Enhance Patient Experience**
- Improve satisfaction scores
- Decrease time to secure second opinion consultations or specialist appointments
- Reduce patient travel time

**Improve Value**
- Reduce cost of care
- Improve quality metrics
- Lower readmissions
- Reduce unnecessary visits

**Increase System Capacity**
- Facilitate intra-system connections (e.g. CIN, Ingaals)
- Increase productivity
- Decrease LOS & no-shows
- Reduce clinician travel time

**Enhance Ease of Practice**
- Enhance & optimize EMR and other clinician-facing apps
- Automate workflows and make best use of human talent

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**Phased Approach**

**FY 20: Foundational Elements**
- Core organizational structure and architecture to drive digital health program

**FY 20 – FY 23: Digital Consumer**
- Increase consumer access and improve experience through Telemedicine and other products

**FY 22 – 24: Digital Clinician**
- Prioritize digital tools that empower clinicians and enhance efficiency

**FY 23 – 25: Automation**
- Utilize emerging technologies to maximize labor resources
Focused Elective Growth Through Signature Programs

Signature clinical programs will be driven through a service line organizational structure with designated clinical and administrative leadership.

- **Cancer**
- **Musculoskeletal**
- **Heart & Vascular**
- **Solid Organ Transplant**
- **Digestive Diseases**
- **Neurosciences**

**Primary Care Growth, Referrals & Partnerships**
- Driving referral volume for sub-specialty programs
- Increased ability to perform in bundled payments

**Clinical Trials & Research**
- Eminence for programs
- Differentiation to referring clinicians and providers

**Faculty Investments**
- Increasing bench strength, breadth and eminence to address program gaps and drive elective growth
- Expanded capacity and growth in volume, revenue and margin

**Off-Campus Network Expansion**
- Access and convenience
- Distribution of signature specialty care throughout network
- Care coordination
Immediate Critical Path Actions for FY 20 “Bridge Year”

1. Launch signature program service line structure with strong clinical and administrative leadership

2. Ongoing financial long term planning in conjunction with Strategic Plan investments

3. Execution of priority programs and initiatives in “Ramp Up” Year across all five strategies
Strategic Plan Overview

Jason Keeler
Executive Vice President and Chief Operating Officer
University of Chicago Medicine – Vision and Values

• Commitment to scientific discovery and educating the next generation of health care providers

• Focus on quality, safety, demonstrated outcomes, and continuous improvement, leveraging best practices across the institution

• Provide an exceptional patient experience and serve the unique needs of each patient and family

• Demonstrate unwavering commitment to our community
UCM’s Inpatient Growth and Financial Impact

Medical Center-Hyde Park Campus Inpatient Only

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Admissions</th>
<th>Net Patient Service Revenue</th>
<th>EBIDA</th>
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<tr>
<td>FY13</td>
<td></td>
<td>$1,246</td>
<td>$172</td>
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<tr>
<td>FY14</td>
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<td>$1,800</td>
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<td></td>
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<td>FY16</td>
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<td>$2,609</td>
<td>1,800</td>
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<tr>
<td>FY17</td>
<td></td>
<td>$2,800</td>
<td>2,000</td>
</tr>
<tr>
<td>FY18</td>
<td></td>
<td>$3,1577</td>
<td>2,227</td>
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</table>

CAGR FY13 to FY18

- Admissions: 3.9%
- Net Patient Service Revenue: 6.3%
UCM adult inpatient activity growing in a declining market

UCM Adult Med/Surg admissions are growing…

…while discharges in the Greater Chicago Area and NW IN are declining

Source: UCM Financial Statements, COMPData

*Projected from FY19 December YTD

^NW Indiana data annualized from Jul-Mar FY18
UCM Five Year Historical Payer Mix (Combined IP & OP)

<table>
<thead>
<tr>
<th></th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19 YTD Dec</th>
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<tbody>
<tr>
<td>Commercial</td>
<td>38.9%</td>
<td>37.8%</td>
<td>37.2%</td>
<td>36.4%</td>
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<tr>
<td>Medicare</td>
<td>36.4%</td>
<td>37.2%</td>
<td>37.9%</td>
<td>38.6%</td>
<td>38.7%</td>
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<tr>
<td>Medicaid</td>
<td>23.5%</td>
<td>23.6%</td>
<td>23.6%</td>
<td>23.2%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Other</td>
<td>1.2%</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.8%</td>
<td>2.1%</td>
</tr>
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</table>
Changes in our market and industry have reshaped how AMCs and community hospitals need to operate to continue caring for patients in ways that balance high quality care, safety, the patient experience and financial constraints.

- As an organization UCM has done its best to navigate operational & market challenges, while delivering the **best outcomes** for its patients, community & employees.

- In the coming years expected rate compression from payers and the shift to less expensive, alternative sites of care requires UCM to define a multi-year plan to **grow patient volumes** and simultaneously **reduce costs** through improvements.

- The Margin Improvement programs are intended to **ensure UCM remains competitive** in the Chicago provider market and at the forefront providing cutting edge care and access to the local community.
Margin Improvement Programs – Transforming UCM Operating Performance Across the System

**Strategic Objective:** Control and reduce unit costs to achieve greater cost efficiency, deliver value to patients, and compete in an evolving health care market

**Parallel Approach:**

1. **UCM Margin Improvement Plan**
   - Revenue Cycle Optimization
   - Operational Expense Management
   - Clinical Cost Management
   - Provider Enterprise Management
   - Informatics & Technology
   - Growth & Revenue Optimization

2. **Ingalls Margin Improvement Plan**
   - Revenue Cycle Optimization
   - Workforce Management
   - Non-Labor Expense Management
   - Provider Enterprise Management
   - Care Management
   - Business Reconfiguration & Growth

Identified savings opportunities to address revenue risks: **$200 - $300M** over five years
# Our Journey

## Where we came from:

**2011**

**Operational Excellence**
- Office of Operational Excellence created
- Foundational Improvements

**Supply chain**
- Implemented lean supply chain techniques to become best-in-class

**Major facilities**
- Lean designed hybrid OR, Cath lab, EP lab, Heart & Vascular Center, Cancer Center IV Therapy, Inpatient units, Burn Center, Family Birth Center, Adult ED/Trauma

**MDI / daily huddles**
- Deployed MDI boards linked to Strategic Plans
- Front-line and executive daily huddles

## Where we’re going:

**Management System**
- Develop Leaders as Coaches
- Establish True North

**E3 Leadership**
- Develop and embed system into the core ways of working and managing
- Focus on the patient of today and tomorrow – critical to support our three part mission
E³ Leadership

✓ E³ Leadership means that we are all **Engaged** in improvement efforts.

✓ We **Evolve** in our understanding of what works best to serve our patients and are willing to change the way we work to meet their needs.

✓ We **Excel** in implementing this knowledge and ensuring that we remain at The Forefront in all we do.

E³ Leadership develops each of our employees to be one of 11,500 inter-dependent problem solvers throughout UChicago Medicine.
FY19 Progress

- Expanded E3 Leadership to Ingalls and the Biological Sciences Division.
- Continued development of Certified Facilitator pool and included CF’s in Transformation Map planning.
- Awarded 22 ECLIPSE certificates to Faculty, Residents, and Clinicians during IGNITE Kaizen to address inpatient discharge delays.
- Certified Facilitator led Kaizen events introduced literature review to improve pain level monitoring of pediatric patients, reduced left without being seen (LWBS) in Comer Children’s Emergency Room, and improved the process of external transfers.
- Facility design and activation Kaizen events included Ingalls Rehabilitation Unit, Ingalls Inpatient Hospice, DCAM Pharmacy, and River East Ambulatory.

Total number of Kaizen events Jul 2011- Dec 2018: 778
(5862 participants)
One-Year Anniversary of Adult Trauma Care
## May 2018 – April 2019: Blunt/Penetrating/Burn

### Activations & Consults

<table>
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<tr>
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<th>Q2 2018</th>
<th>Q3 2018</th>
<th>Q4 2018</th>
<th>Q1 2019</th>
<th>April 2019</th>
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<td>539</td>
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<td>338</td>
<td>263</td>
<td>214</td>
<td>103</td>
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<tr>
<td></td>
<td>40.1%</td>
<td>37.4%</td>
<td>37.8%</td>
<td>39.7%</td>
<td>50%</td>
<td>39.3%</td>
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<tr>
<td>Burn/Other</td>
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<td>20</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>32</td>
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<td>1.1%</td>
<td>0.7%</td>
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<td>1.1%</td>
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<td>Totals:</td>
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<td>903</td>
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<td>539</td>
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### Classification

Data Source: Trauma Registry
Clinical Updates

Craig Umscheid, MD, MS
Chief Quality and Innovation Officer and VP of Healthcare Delivery Science
Executive Q&A Session

- **Amy Ross** – Vice President, Office of Strategic Planning
- **Jason Keeler** – Executive Vice President and Chief Operating Officer
- **Craig Umscheid, M.D., M.S.** – Chief Quality and Innovation Officer and VP of Healthcare Delivery Science
Break
Supply Chain Strategy

Eric Tritch
Vice President, Supply Chain and Logistics
UCM 2025 Vision and Clinical Priorities

Be an eminent academic health system by being *At the Forefront* of discovery, advanced education, clinical innovation, and the delivery of transformative health care.

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**Growth**
- Creating a sustainable financial future through growth of highly differentiated clinical services and fostering a culture of continuous improvement and cost efficiency
- Elevating signature clinical programs that integrate discovery and delivery of novel therapies, provide high quality care delivery, and offer innovative clinical trials and training programs
- Expanding the health system, ambulatory, and physician network to make UCM care accessible in new markets

**Value**
- Delivering exceptional value for patient care through highest quality performance with greater cost efficiency
UCM 2025 Supply Chain Vision

Be an eminent supply chain team recognized for innovation & problem solving, that delivers exceptional value and enables UCM to be *At the Forefront* of discovery, advanced education, clinical innovation, and the delivery of transformative health care.

This vision will be achieved by implementing the following priorities:

**Care Experience**
- Ensuring the Right Product/Service/Equipment, is in the Right Place at the Right Time, at the Right Quality, and the Lowest Total Cost
- Supporting acquisition & implementation of the latest technologies across the care continuum to improve access, experience and value for patients and clinicians
- Engaging and developing our team members in support of delivering an exceptional patient and caregiver experience

**Growth**
- Driving robust Value Analysis & motivated problem solving that supports a sustainable financial future of highly differentiated clinical services and fosters a culture of continuous improvement and cost efficiency
- Enabling signature clinical programs to integrate discovery and delivery of novel therapies, provide high quality care delivery, and offer innovative clinical trials and training programs
- Providing consistent high value supply chain services across the expanding the health system, ambulatory, physician network, and joint venture & affiliate partners
- Driving business development and partnership with local and diverse organizations that support growth & sustainability in the communities that we serve

**Value**
- Delivering exceptional value for patient care through the highest quality performance with greater cost efficiency
Setting the Stage
“The nations AMCs are the nexus of research, education and critical care…..AMCs will likely need to make some dramatic changes if they are to continue to thrive.”

“AMCs shoulder a significant share of the care for vulnerable populations……..37% of all charity care & 27% of all Medicaid hospitalizations.”

“Eroding clinical profitability threatens their ability to fund various components of their mission.”

“New entrants are skimming the cream leaving them with the sickest, costliest patients.”
“With declining clinical margins and an expanding tripartite mission, they can’t afford to do it all. They will need to invest in business models that have the best financial returns.”

“Change will mean rethinking costs which are higher at AMCs to assure care is affordable to everyone.”

“AMCs will never be the lowest cost provider. The challenge is how do we become a lower cost provider.”
Pharmacy Department Update
## Department of Pharmacy Fast Facts

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<th>Category</th>
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<td>Inpatient FTE</td>
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<td>Residents</td>
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<td>Board Certified Pharmacists</td>
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<td>UCM Inpatient Doses</td>
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<td>340B</td>
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<td>GPO</td>
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<td>WAC</td>
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Suite of Services & Technologies to Support the Ambulatory Pharmacy

- Meds-2-beds / Clinics
  - Integration w/ Hospital
  - Possible Same Day Fills
- Investigational Drug Services
  - Specialized Clinical Knowledge
  - Clinical Trials
  - Face to Face Education
- Enhanced Patient Education
- Enhanced Patient Education
- Mail order, Retail, Outpatient Infusion
  - Provider Connectivity
  - Multiple Dispensing options
  - Optimal Medical Regimens
- Lab Data Access
- Provider Connectivity
- Outcomes Mgmt Platform
  - Total patient picture
  - Enhanced Data Capture
- EMR Platform
- Patient
- Specialty Pharmacy
- Specialty Pharmacy
Retail Pharmacy

- Operations Monday-Saturday
- Retail staffed by a manager, 4 Pharmacist, 6 technicians
- Meds-2-beds program- staffed with 4 Clinical Pharmacist and 7 Ambulatory Medication Access Coordinators
- Mail order services- staffed by a pharmacist and technician
- Operating system is Epic Willow which connects to the hospitals EMR system
- My Chart connectivity
- Private Consultation room
- Automation
Automation

- Parata Max dispensing machines - holds up to 200 unique NDC’s
- Fills up to 40%-50% of volume
- Kirby Lester counting machines
- Fillmaster for Reconstitutions
New Services

- Compliance packager - Holds 323 unique medications - similar to Pillpak
- Emergency Department Retail Pharmacy
- Prescription pickup kiosk - Script Center - 24 hour prescription pick-up
- Insurer Contract Management & PhRMA Liaison – Jim Mayahara
Compliance Packager and Script Kiosk
Inpatient Pharmacy Services

Safe Drug Distribution Services

Intensive Clinical Services

General Clinical Services
DoseEdge Tele-Pharmacy

- Bar Code Guided IV Preparation
Key Priorities For The Pharmacy Enterprise

Improve Efficiency & Lower Cost by Insuring Appropriate Inpatient Drug Utilization

“Improving our Foundation”
UCM Drug Cost Per Inpatient Admission Excluding CAR-T

<table>
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<th>Year</th>
<th>Cost</th>
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<td>'14</td>
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### 90% of Drugs Dispensed Are Unbranded Generics

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<th>Rank</th>
<th>Therapy Area</th>
<th>MAT NOV 2018 UNADJUSTED RX (MNs)</th>
<th>SHARE (%)</th>
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<td>TOTAL SPEND</td>
<td>BRAND</td>
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<td>10.6</td>
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<td>PAIN</td>
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</tr>
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<td><strong>TOP 10</strong></td>
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<td><strong>3,033.2</strong></td>
<td><strong>254.3</strong></td>
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Source: IQVIA, National Prescription Audit, January 2019
Note: Unbranded Generic includes "Other" category
Generics Only Represent 17% of the Spend

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<th>THERAPY AREA</th>
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<th></th>
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<td>BRANDED GENERIC</td>
<td>UNBRANDED GENERIC</td>
<td>TOTAL $ (BNs)</td>
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<td>TOTAL $ (BNs)</td>
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<td>1.4%</td>
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<td>$18.9</td>
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<td>7</td>
<td>ANTICOAGULANTS</td>
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<tr>
<td>10</td>
<td>NERVOUS SYSTEM DISORDERS</td>
<td>67.0%</td>
<td>1.8%</td>
<td>31.2%</td>
<td>$8.2</td>
<td>76.4%</td>
<td>6.9%</td>
<td>16.7%</td>
<td>$14.1</td>
</tr>
</tbody>
</table>

Source: IQVIA, National Sales Perspectives, January 2019
Note: Unbranded Generic Includes "Other" category
* Ranked on MAT NOV 2018
### 29 Products with Patent Expiration in 2019-2020

<table>
<thead>
<tr>
<th>Brands UCM Purchases</th>
<th>Manufacturer</th>
<th>Indication</th>
<th>Annual Sales</th>
<th>Exp Date</th>
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<tbody>
<tr>
<td>Firazyr (icabant)</td>
<td>Shire</td>
<td>Hereditary Angioedema</td>
<td>$663M</td>
<td>July 15, 2019</td>
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<tr>
<td>Noxafil (posaconazole)</td>
<td>MSD</td>
<td>Antifungal prophylaxis for stem cell transplant</td>
<td>$636M ($875K)</td>
<td>July 19, 2019</td>
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<td>Durezol Ophthalmic (difluprednate)</td>
<td>Alcon</td>
<td>Corticosteroid</td>
<td>$131M</td>
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<tr>
<td>Vivitrol (naltrexone)</td>
<td>Alkermes</td>
<td>Alcohol dependence &amp; relapse of opioid dependence treatment</td>
<td>$269M</td>
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<tr>
<td>Gattex (teduglutieid)</td>
<td>Shire</td>
<td>Short Bowel Syndrome</td>
<td>$288M</td>
<td>June 21, 2020</td>
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<tr>
<td>Ciprodex Otic (Cipro/Dex)</td>
<td>Novartis</td>
<td>Antimicrobial/Corticosteroid</td>
<td>$500M</td>
<td>August 10, 2020</td>
</tr>
</tbody>
</table>

Source: Drug Patent Watch
Drug Shortages Increase Drug Costs

National Drug Shortages: Annual New Shortages by Year
January 2001 to March 31, 2019

Note: Each column represents the number of new shortages identified during that year.
University of Utah Drug Information Service
Contact: Erin.Fox@hsc.utah.edu, @foxerinr for more information.
Solutions for Drug Shortages

Expert Insights: Fifteen Percent of 503B Compounding Outsourcing Facilities Have Violated FDA Regulations

Lawmakers urge DOJ to launch criminal investigation of generic drug makers

By Wayne Drash, CNN

Updated 5:02 PM ET, Thu June 13, 2019
Biosimilars – 22 Approved/6 Marketed Products
Cost Reduction Targets for FY 2020
Goal = $4.3M

1. Chemotherapy stewardship – Rituximab $2M inpatient spend
2. IVIG utilization inpatient – Hem/Onc & Rheumatology
3. Biosimilars – Rituxan, Herceptin & erythropoietin
4. iNO Stewardship Cardiac Surgery
5. ICU electrolyte depletion – University of Penn experience ↓ cost $1.25M
6. VTE prophylaxis – shifting from heparin SC to enoxaparin
7. WAC reduction due to waste – Activase, NovoSeven, Micafungin, & Vasopressin (cardiac anesthesia drawing up in anticipation of use)
Key Priorities For The Pharmacy Enterprise

- Improve Efficiency & Lower Cost by Insuring Appropriate Inpatient Drug Utilization
  “Improving our Foundation”

- Provide New Sources of Revenue with the Expansion of Ambulatory Pharmacy Programs
  “Extending our Reach”

Key Priorities
UCM Pharmacy Enterprise Goal

$75M Net Incremental Revenue Annually Within 5 Years

Specialty = $50-60 M

Infusion = $25 M

Mail Order Central Fill = $15M
Specialty Pharmacy Rapid Growth Continues
Infusion – Focusing on Freestanding and Home Infusion in 2020

- Hospital-Based Infusion
- Physician Office-Based Infusion
- Home Infusion

Need class of for hospital operated non-HOPD freestanding infusion
DCAM Prescription Capture Up 4% Annually

<table>
<thead>
<tr>
<th>Prescription Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total E-Rx</td>
<td>100%</td>
</tr>
<tr>
<td>Non-Contract E-Rx</td>
<td>55%</td>
</tr>
<tr>
<td>Contract E-Rx</td>
<td>28%</td>
</tr>
<tr>
<td>DCAM E-Rx</td>
<td>17%</td>
</tr>
</tbody>
</table>

802,928
470,272
230,502
133,000
Key Priorities For The Pharmacy Enterprise

- Improve Efficiency & Lower Cost by Insuring Appropriate Inpatient Drug Utilization
  "Improving our Foundation"

- Provide New Sources of Revenue with the Expansion of Ambulatory Pharmacy Programs
  "Extending our Reach"

- Advance Quality in Therapeutics by Reducing Clinical Variation
  "Improving our Foundation"
High Reliability – Reducing Clinical Variation

Analysis of Cost & Outcome Using the Vizient CDB
Comparison with Honor Roll Hospitals
Kidney Transplant Cost Drill Down

$1.237M
Key Priorities For The Pharmacy Enterprise

- Improve Efficiency & Lower Cost by Insuring Appropriate Inpatient Drug Utilization
  - "Improving our Foundation"

- Provide New Sources of Revenue with the Expansion of Ambulatory Pharmacy Programs
  - "Extending our Reach"

- Advance Quality in Therapeutics by Reducing Clinical Variation
  - "Improving our Foundation"

- Partner in Population Health Management Initiatives
  - "Change"
Population Health – Targeting High Risk, High Volume Patients

Extend Physicians By

Managing Targeted Patient Populations

Assuring Medication Access & Adherence
Endocrine Clinic – 95% Prescription Retention Rate

Extend Physicians with MTM Program

830 Diabetics in Endocrine Clinic with HA1C > 9

Mail Order Rx Program & Call Center
Major Trends

Nest Smart Home
Major Trends and Factors Impacting Pharmacy

# 1 Specialty and Orphan will dominate new drug launches

Exhibit 36: Average Number of Global NAS Launches Annually per Period and Percentage of Launches by Type

- **2004-2008**: 33 launches
- **2009-2013**: 36 launches
- **2014-2018**: 46 launches
- **2019-2023**: 54 launches

**Forecast**
- Specialty: 65%
- Orphan: 45%
- Biologic: 35%
- Oncology: 30%
- Average Annual Global NAS Launches

Fast Facts

• 59 new active substances approved last year → record year!

• Number of drugs in late stage development has increased 39% over the past 5 years.

• Oncology drugs have increased in number by 63% over the past 5 years contributing 40% of the total pipeline increases.

• Other areas of focus are
  ALS
  Degenerative musculoskeletal conditions
  Rare GI conditions
  Non-narcotic pain treatments
**Significant Pipeline Products**

**Autoimmune Drugs**

- Risankizumab, a subcutaneous interleukin (IL)-23 inhibitor for psoriasis (2019)
- Upadacitinib, a oral JAK-1 inhibitor for rheumatoid arthritis (2019)
- Bimekizumab, a subcutaneous IL-17A and -17F inhibitor for psoriasis (2020)
- Filgotinib, a oral JAK-1 inhibitor for RA, ulcerative colitis, and Crohn’s disease (2020)

**Multiple Sclerosis**

- Diroximel fumarate, an oral monomethyl fumarate prodrug for RMS (2019)
- Ozanimod, an oral sphingosine 1-phosphate receptor modulator for RMS (2019)
Significant Pipeline Products

Oncology

- **Quizartinib** - an oral treatment for acute myeloid leukemia (2019)
  FDA Advisory Committee voted 8-3 to deny approval
- **Selinexor** - an oral treatment for multiple myeloma (2019)
- **Pexidartinib** – an oral treatment for tenosynovial giant cell tumor (2019)
  FDA Advisory Committee voted 12-3 in favor of approval
- **Entrectinib** – an oral treatment for for NTRK-fusion+ solid tumors (2019)
- **Darolutamide** – an oral treatment for prostate cancer (2019)
- **Fedratinib** – an oral treatment for myelofibrosis (2019)
Major Trends and Factors Impacting Pharmacy

# 2 Shift to Emerging Biopharma for both innovation & product marketing

Emerging biopharma companies represent 84% of early-phase research but a sharply rising share of late-phase research

Exhibit 4: Emerging Biopharma Share of Early, Late and Overall R&D Pipeline 2003–2018

Source: IQVIA Pipeline Intelligence, Jan 2019
Fast Facts

• Emerging Biopharma (EBP) represent 73% of late stage research

• EBP is responsible for 65% of all clinical research trials

• EBP launched 64% of the 59 new active substances approved by the FDA in 2018 & 50% of launches in the last 5 years

• Over 50% of the Emerging Biopharma drugs had an orphan designation

• Typically more restricted limited distribution channels
• AMCs need a supply channel for access
Major Trends and Factors Impacting Pharmacy

# 3 Vertical market integration will continue

- Jury is still out concerning impact on cost and quality
- More market fragmentation of care with larger narrow networks dominated by PBM-led pharmacy services
- Everyone wants the cream – At the Sanford C. Bernstein 2019 Annual Strategic Decisions Conference in New York City, United Healthcare CEO David Wichmann and CFO John Rex said they want to build out the company to generate $100 billion in annual revenue by 2028. The executives said they'll expand their footprint in areas outside of the hospital. These include urgent care practices, surgical centers and primary care offices. (Source: Becker’s, June 5, 2019)
- PBMs have pushed down on prescription margins – 6% of prescriptions filled are at a negative margin
- Optum and Caremark have aggressive DIR claw-back fees
Major Trends and Factors Impacting Pharmacy

# 4 Consumerism in healthcare is growing

- Average deductible have tripled over the last decade for employer-based plans
- 52% of those with high deductible plans cannot afford the deductible
- Consumers increasingly want care closer to home
- 58% would be comfortable with an in-person visit with an MD at a clinic backed by Google, Amazon or Apple
- AMCs – lower costs, expand footprint & broaden access points both physical & virtual

Source: PWC Health Research Institute
Major Trends and Factors Impacting Pharmacy

# 5 Drug Pricing – President’s Blueprint

- International Pricing Index – caps for Medicare reimbursement on drugs based on prices paid internationally
- Remove safe harbor for rebates eliminating drug manufacturer rebates
- Six protected drug classes – allow utilization management and step therapy
- Pricing information on DTC advertising
- Lower 340B reimbursement
- Pelosi plan to negotiate top 25 - 250 Medicare drugs
- Importation
Major Trends and Factors Impacting Pharmacy

# 6 Value-based alternative payment models

- Forbes predicts 15% of healthcare spending is tied to outcome-based concepts
- Cost & quality improvements are moving to two-sided risk models
- Bundled payments for care improvement will require a strong alignment between physicians, pharmacy and others within the health system…….also broader geographic regions for growth
- AMCs could act as the financier for expensive curative gene and cell therapies focused on diseases plaguing our population
  - Zolgensma for spinal muscular atrophy – $2.125M
  - Luxturna for rare blindness - $850,000
  - Gene therapy for Alzheimer's - ?
Major Trends and Factors Impacting Pharmacy

# 7 Predictive Analytics, Artificial Intelligence & Digital

- Brink of large-scale disruption
  - Radically interoperable data
  - Open yet secure platforms

- Digital health and mobile technologies will enable the capture of drug efficacy and safety data remotely – allow patient reported outcomes

- PA/AI will predict which patients may have certain diseases – genetic predisposition

- PA/AI/DH will support standardization of medical decision making that will lower cost and propel value-based care

- PA/AI will minimize clinical trial design risks and speed enrollment by identifying protocol ready patients

- Care model focus will change from clinical to clinical-IT
Summary

1. New era of pharmaceutical pricing

2. Rise of Emerging Biopharma companies will change landscape for access to new innovation

3. Disruptors will try to change the front door of healthcare from hospitals to other locations, possibly pharmacies, while skimming off profitable low, risk care

4. Technology will be a large disruptor that could also change practice models for pharmacy

5. AMCs will rely on ambulatory pharmacy services to provide alternative sources of revenue and compliment population and value-based health initiatives.
Clinical Strategic Sourcing & Value Analysis

Ian O’Malley
Director, Strategic Sourcing - Clinical
Strategic Sourcing Agenda

- Strategic Sourcing Overview
- Cost Optimization Updates-Fiscal Year 2019
- New Tools and Value Analysis Overview
- Fiscal Year 2020 Challenges
Clinical Strategic Sourcing Overview

- Healthcare Strategic Sourcing is an organized and collaborative approach to leveraging targeted spend across a system with select suppliers that are best suited to optimize value for our patients and our organization.

- It encompasses Capital Equipment, Service, Consumables, Clinical Trials & Value Analysis, Contract Management and Negotiation, Spend Analytics, Category Management, SRM and Scorecarding
FY19 Progress Update

1. Cost Optimization
   Case Receipt Automation
   Cost Per Case Dashboard
   Distribution
   Contribution Margin Tool
   Procedural Analytics

2. Waste Reduction
   ‘No Ask, No Open’
   Expiration Management
Cost Per Case Dashboards

- Automatically generated and emailed from our Tableau ‘Cost Per Case’ tool to our clinicians on a weekly/monthly cadence
Case Receipt Work

- For the surgeons who want immediately actionable data we can build out a daily email through Tableau containing the days procedural receipts

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</table>
# No Ask No Open Initiative

**Plastic Surgery & Neurosurgery**

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<th>Surgeon Responsibility</th>
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<tbody>
<tr>
<td>• Request supplies/implants to be opened when needed during the case, rather than everything opened at the beginning of the case</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nursing Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Wait until the surgeon has requested a supply/implant before opening</td>
</tr>
<tr>
<td>• Document any wasted (open and not used) supplies in EPIC</td>
</tr>
<tr>
<td>• Supplies/implants can be available in the room, but should be left unopened</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Supply Chain Responsibility</th>
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<tbody>
<tr>
<td>• Review wasted supply trends at OPEC Value Analysis meetings</td>
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</table>
Procedural Analytics

- Benchmark procedural costs across Vizient nationally
- Includes quality metrics
Driving Out Costs-Value Analysis

Value Analysis is: our process to effectively **remove cost** and **improve quality & outcomes** through supplies & services spend management & utilization optimization.

Value = Quality / Cost

**Utilization & Waste**
- VA is also used as a venue to track and trend how products are being used for standardization opportunities across our system.
- We also track products expiring within 90 days along with reviewing cost per case data to identify any possible wasted items in the room

**New Technology**
- New technology being proposed at UCMedicine is always assessed through the lens of CQO.

*MedApproved is being rolled out to our Value Analysis Teams to streamline the product trial request process*
Driving Out Cost-Value Analysis

These teams continue to be the venue for using these new tools to continue to drive costs down and increase the quality of our care.
System Contracting & Sourcing Alignment

What does this mean for our suppliers?

- UCMedicine has centralized Strategic Sourcing & Contract Management
- Many preferred and contracted suppliers have seen business grow tied to successful conversions at our off site locations and Ingalls Memorial.
- We are also closely aligning our capital sourcing to take advantage of period incentives.

This growth must also drive value to UCMedicine with cost reduction and enhanced contractual value.
FY20 Sourcing Challenges

- Medical Device Excise Tax / Tariffs
- Downward Margin Pressure Continues
- Ongoing Supply Issues
- Managing growth while maintaining supplier relationships
- Utilization management will be a primary goal for our team in FY20
How can you stand out?

- Insulate Us From Supply Issues
  Backorders due to supply & FDA holds

- Complete Proposals
  Capital-MDS², Service Costs, All Acquisition Options
  Supplies-Revenue data, nationally competitive pricing

- Creative Cost Reduction Ideas

- Customer Service
Finally-Thank You To Our Supplier Partners
Non-Clinical Sourcing Updates

Osvaldo Torres
Director, Strategic Sourcing – Non-Clinical
Current UChicago VA Model

VA Executive Steering

- Ambulatory VAT
  - Anesthesia OPEC Subcommittee
  - GI / CERT / Bronch VAT
- OPEC
- Med/Surg VAT
  - Ortho OPEC Subcommittee
- Pharmacy VAT
- IR / Vascular VAT
- Linen VAT
- Strategic Planning VAT
- Lab VAT
- Finance / Rev Cycle VAT
- FPD&C VAT
- IT VAT
- Marketing VAT
- Support Services VAT
- HR VAT

- Clinical Team
- Non-Clinical Team
VA and Contracting

IT Collaboration

- Engaging IT into VA Initiatives early in the process
- Increasing support of IT specific projects through contracting and sourcing
- Collaborative efforts with IT and Legal to develop workflows through iValua to expedite contract review

SRM = QCDTS

- Utilizing QCDTS criteria in supplier selection
- Apply QCDTS KPIs/SLAs in contracts
- Reviewing them in Business Reviews
University Collaborative

- Collaborative effort between 4 operating entities under the University of Chicago
- Identify opportunities across the 4 institutions to leverage synergies and optimize value
- Monthly meetings with updates on key initiatives
- Launch joint RFPs, address supplier performance issues, optimized contracts
Supply Chain Affiliates

UCM Supply Chain Affiliates

La Rabida Children's Hospital

St. Bernard Hospital and Health Care Center

CancerCare Specialists of Illinois

Shirley Ryan AbilityLab
Supply Chain Affiliate Process Improvements

**Project Planner**

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**Implementation**

- Establishing milestones/timelines
- Supplier Engagement
- Aligning support with UCM Sourcing Team

**Ongoing Support**

- Identifying new opportunities to drive value
- Business Reviews
- Updates on UCM Sourcing Initiatives
Supply Chain Affiliate Consulting Services

Training Future Supply Chain Leaders!

Introduction to sourcing in a clinical environment
How we apply strategic sourcing within UCM
Module 1

Introduction to contract management
How to drive value from our suppliers ongoing
Module 12

Spreading the message of lean supply chain and QCDTS
Purchasing / SC IT Systems Agenda

- SC IT Systems Overview
- FY19 Project Updates and Accomplishments
- FY20 Strategy
- Supplier Alignment
FY19 Progress Update

1. Advanced Perfect PO Project
   Expanded eProcurement Scorecard Metrics
   Eliminated Fax Ordering/Confirmations
   Reduced PO creation/approval lead time

2. Process Improvement Projects
   Implemented Point of Use Scanning in the OR Rooms
   Integrated Ingalls Contract Management
   Automated Manual Invoice Processing
Purchase Orders: Increase Trading Partners & Eliminate Fax

**PO Supplier Partners Per Quarter**

**Count of Fax POs Sent Per Month**
Expanded Supplier Scorecard Measurements to Drive Transactional Efficiencies

**Previous Scorecard**

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**Current Scorecard**

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<td>Ingalls EDI Enabled</td>
<td>100%</td>
<td>Enabled for 850, 855, 856, 810</td>
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<tr>
<td>% UCMC PO's sent via GHX</td>
<td>100%</td>
<td>% of lines 850, Targed 100% (excluding capital, service and BO)</td>
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<td>Average POA Response Time</td>
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<td>Response Time (min) in GHX</td>
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<td>Unconfirmed PO's (Non-GHX)</td>
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<td># of Credit Holds</td>
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Enhanced Business Intelligence
FY20 SC IT System Priority

- **Beyond FY20** – Robotic Process Automation / AI
- **Paperless Procure 2 Pay**
- **Expand Barcode (GTIN) OR Scanning**
- **Ingalls SC Process Integration**
- **Bill Only EDI PO Process Improvement**
- **Cloud ERP Assessment**
- **Item Master EDI Transaction**
How to Help Us!

- Increase EDI Transactions
- Collaborate in Bill-Only Automation Solution
- Provide One Supplier View
- Publish Accurate GTIN Data to GUDID
- Communicate PO Exception Detail
Supply Chain Operations Overview

Robert Boyden—Assistant Director, Supply Chain Operations
Nancy Olmos—Assistant Director, Supply Chain Operations
Operations Agenda

- Supply Chain Operations Video
- Operations Overview
- Focus KPI’s
- Voice of the Customer
Supply Chain Operations Overview
Supply Chain Areas 2011 ...
Supply Chain Areas Transformed

- Support 200+ supply rooms on Kanban RFID inventory management system (Helios)
- Use data to identify problem areas
- Leverage team of analysts to leverage performance data to continually improve upon internal operations
Supply Chain Philosophy

Who We Are ....

How We Impact

Who
- UCM Patients and Families
- UCM Clinicians
- UCM Supporting Services

What
- Quality - Zero Defects
- Cost - Best in Market
- Delivery - 100% on Time
- Technology - At the Forefront
- Service - Best in Class

Where
- People
- Safety
- Quality
- Service
- Finance
- Positioning

How
- Solve Problems
- Act on Opportunity Ideas
- Negotiate Contracts
- Place Orders
- Receive and Deliver Supplies
- Manage Supply Relationships

Why
Suppliers People and Work

How We Make Decisions

People First
- Patient and Employee safety is paramount to everything we do

Our Foundation

E3 Leadership
- Engage
- Evolve
- Excel

Our Supply Chain

Patient

Clinician

Sourcing

Operations

Analytics

Purchasing

Supplier

We are engaged in using lean processes to improve how we make a difference every day for our patients.

We evolve in our understanding of what works best.

We excel in putting what we learn into action, keeping us at the forefront in everything we do.

"We strive to be the best at what we do, while continually raising the bar to enable UChicago Medicine to realize our mission and stay at the forefront of clinical care, research, and our patients and their families. To provide perfect care, and our supply chain team delivers on this by reliably providing the right product at the right place at the right time. This ensures we deliver value to our patients by challenging ourselves and our suppliers to improve quality, cost, delivery, technology, and service. " - Eric Tilich, VP Supply Chain

Supply Chain & Logistics
5841 S. Maryland Avenue, Chicago, IL 60637
uchospitals.edu
Supply Chain Operations

Quality
Process Execution
Quick & thoughtful problem solving (5-Why, A3)
High Performance Work Environment (5S, Visual Management)
Expiration Management

Cost
Inventory Optimization
Slow / No move Inventory Management
Overstock Management
Labor Expense Management

Delivery
On Time Every Time
LUM/JIT – Distribution/Shortest Lead Time

Technology
Automation
Visibility
Analytics

Service
Fill Rate Management
Stockout Management
Expiration Management (Cost)

How can you help with expiration mitigation?

- Work with Inventory Planners to swap product one for one.
- Issue credit to UCM for expiring product.
- Trade for supplies with longer shelf life.
- Swap for supplies of similar value.
Top 25 suppliers by line count account for 95% of our ordered lines. Across these suppliers, we had nearly 40K lines unfill (3.4% of total lines ordered).
15 suppliers reported 64 unique recalls from June 2018 – May 2019 which accounted for nearly 60% of the total 109 recalls reported.
We conducted interviews with our Inventory Planners - all of which work very closely with Supplier Reps and Customer Service Centers

<table>
<thead>
<tr>
<th>The GOOD</th>
<th>The BAD</th>
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<tbody>
<tr>
<td>- Willing to swap products</td>
<td>- Mergers – who is the new contact?</td>
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<tr>
<td>- Identify replacements</td>
<td>- Bypassing Inventory Planners</td>
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<tr>
<td>- Timely and Transparent</td>
<td>- Not adhering to VAT Process</td>
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<tr>
<td>- Phone #s for correct contacts</td>
<td>- Ignoring expiration mitigation e-mails</td>
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<tr>
<td>- Local Reps</td>
<td>- Getting bounced through customer service phone system</td>
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<td>- Web portal to view inventory, order status</td>
<td>- Sending all reps away for a conference w/o providing coverage</td>
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<td>- Ship product even if there is pricing holds</td>
<td>- Lacking sense of urgency</td>
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<td>- Products shipped with PO</td>
<td>- Not providing alternate contact info</td>
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<td>- ASNs</td>
<td>- Inconsistent pricing (invoice/contract)</td>
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<td>- Ownership of conversions</td>
<td>- Discontinuing items without notification</td>
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<tr>
<td>- Managing through weather, unforeseen circumstances</td>
<td>- Inaccurate communication about product availability</td>
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<tr>
<td>- Contingency plans</td>
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<tr>
<td>- Assist in solving problem</td>
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Ambulatory Transformation

Rob Martin – Assistant Director, Supply Chain Project Management
Mike Fons – Director, Supply Chain – Ingalls Memorial Hospital
In FY15/16, UCM footprint was limited; through partnerships, JVs and ambulatory sites, UCM has expanded significantly in past several years.
Non-Acute Growth

Growth rate of 1-2 sites/month

15+ Physician practice locations added in last year

100% supply volume increase YTD at various large box multispecialty clinic sites

UCM has 8 Ambulatory Care Centers and 30+ additional physician office locations
Challenges

• Trying to support non-acute sites with acute org structure and strategy
• No supply chain staff at off-campus locations
• Struggling to keep up with pace of growth of new sites
• No playbook for integrating acquired physician clinics
• Lack of non-acute formulary for supplies or equipment
• No metrics focused on non-acute supply chain performance
### System Goals

#### IDN Customer Continuum

**Tier 1 - Status Quo**
- 25% of IDNs
  - Legacy Org Structure
  - Legacy Mentality of “Anything at anytime”
  - Service Focus – “just keep sites happy”
  - No plans for integration

**Tier 2 - Desire**
- 25% of IDNs
  - Legacy Org Structure
  - No investments in dedicated non-acute SC resources
  - Desire for SKU reduction

**Tier 3 - Commitment**
- 40% of IDNs
  - Evolving Org Structure (Med group & SC)
  - Investment in dedicated non-acute SC resource
  - Initiated formulary work

**Tier 4 - Aligned**
- <10% of IDNs
  - Integrated Org Structure (Med group & SC)
  - Investments in multiple dedicated non-acute SC resources
  - Implemented formulary
  - LEAN standardization

---

**Customer Characteristics**

- Legacy Org Structure
- Legacy Mentality of “Anything at anytime”
- Service Focus – “just keep sites happy”
- No plans for integration
New Site Playbook
New Site Checklist

- New Site activation checklist to monitor progress of key milestones

- Weekly project review calls scheduled to ensure follow through

---

**At the Forefront**

**UChicago Medicine**
Previous State
Completed Kanban Refresh
Site Maturity & Improvement
## Non-Acute Site Progression

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### Checklist - Must Hit All Items to Qualify

- **Level 1**
  - Cost Center and Contact Info Received
  - Deliver To/Ship Established
  - Supply List Reviewed and Signed Off On
  - Par Levels Established

- **Level 2**
  - Build Out Completed
  - Training Completed with Site Staff
  - Supplies Being Ordered Through Cardinal
  - Supply List Compliant with Formulary
  - Daily Resolution Report Contact Added

- **Level 3**
  - Standard Work Posted in Supply Area
  - Monthly SS Checklist Conducted
  - Meeting Cadence Established with Site Manager

- **Level 4**
  - Supply Chain Staff Managing Replenishment
  - Scanning Replenishment Solution in Place
  - Par Optimization Report Run Quarterly
  - GAP Report and Weekly Dashboard Shared with Site

### Ordering Methods

- Oracle
- Lawson
- Helios
- Hybrant
- Punchout
- Market Place
# Sustainment Measures

## 5S Audit Sheet

<table>
<thead>
<tr>
<th>Area:</th>
<th>Audit check</th>
<th>Audit result</th>
<th>Audit Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditor:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Only needed items are in the supply area</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. Category signs are fixed to the wall</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. Nothing hanging from supply carts or stored on top of carts</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. All movable items have a designated location</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5. No safety hazards exist (trip or bump hazards, loose wires, holes, etc.)</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. All supplies are clearly labeled; anyone can tell at a glance what goes where</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7. All items are arranged so they are easy to grab</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. Frequently used items are stored at the point of use</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9. Bins have dividers or clear designations of where to pull from first</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>10. All signs and labels are clean, neat and legible</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>11. Floors are clean of scrap and debris, no food or drinks in non-designated areas</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>12. No cardboard in the room</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>13. Lighting in the work area is bright and adequate; no bulbs out</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>14. Equipment and work center is organized in an ergonomic fashion</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15. No broken bins or dividers</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>16. Work area is labeled in a uniform manner (standard labels, color codes, etc.)</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>17. Standard work is posted in the room</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>18. Order sheet is posted in the room or is readily available</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>19. 5S Checklist is posted in area, being followed and up to date</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>20. 5S Scorecard is posted in area and up to date</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>21. Previous audit sheets from the last month are readily available and follow-up is app</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>22. All area staff demonstrate ownership for daily 5S of area</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>23. Area leadership review 5S score and follow-up status with staff</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>24. Current 5S score is greater than previous 5S score - or - both are max score of 5.0</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>25. The 5S’s have become a way of life — there is noticeable continuous improvement</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Scoring directions:** Add the total number of “Yes”s and divide by 5

### Offsite Supply Room 5S

- **Work Sequence**
  1. All moveable equipment in designated areas.
  2. Floor clean and free of debris.
  3. Empty packaging placed in trash can.
  4. Nothing hanging from carts.
  5. Nothing stored on top of carts.
  6. No unnecessary items present in the room.
  7. Shelves and bins are free of items that are not designated to be there.
  8. Bins have not been moved from their designated locations.
  9. Signs and labels are clear and legible.
  10. Ordering MUST take place before 1:30pm.

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[Charts and diagrams related to 5S audits and continuous improvement are shown.]
- Site specific dashboards reviewed with stakeholders on monthly basis

- Track trends in spend, line count, formulary compliance, and fill rate
Formulary Standardization

- Started by benchmarking other hospital systems

- Initial formulary was over 13,000 items

- Worked with stakeholders to fine-tune and standardize supply offerings, reduced formulary to current state of 1,300 SKUs broken out by specialty (ex: Primary Care, Peds, Women’s, Ortho, etc…)

- Shifted mindset from asking “what would you like to have?” to saying “here is our standard list for this service, anything missing?”

- Sustained through Ambulatory Value Analysis Team
Formulary Standardization

- Monthly Department level SKU identification of formulary and non-formulary purchases
- Quarterly Formulary Audits
- Formulary recommendations & VAT Review

% Spend on Formulary

- Nov-18
- Dec-18
- Jan-19
Bringing Value to Ambulatory

- Established Ambulatory Value Analysis Team comprised of clinical and site stakeholders

- Forum to address new item requests and project initiatives

- Discuss conversion and utilization savings opportunities

- Looking to leverage suppliers to help identify opportunities
Next Steps

- Continued standardization and formulary refinement
- Evaluate both clinical and non-clinical opportunities to create value for our stakeholders
- Implement Kanban and replenishment processes to drive order efficiency
- Supply chain people do supply chain work!
Supplier Diversity and Local Spend Update

David Spence
Assistant Director, Strategic Sourcing
Supplier Diversity and Local Spend

Objective
6.5% Of operational spend from women and minority businesses

Continuous Improvement
Increase % of spend every year

Local Growth
CASE, Five Forward (Chicago United), HEAL and UChicago Local
Year-Over-Year Improvements

Currently at 6.8%*

~15% growth since FY16

- FY19 Goal: 6.5%
- FY19 Monthly Averages
  - Tier 1: $805,987
  - Tier 2: $359,009
Tier 2 Direct

Tier 2 Direct = 40% of M/WBE Spend at UChicago Medicine

Special Recognition:
UCM 2019 Supplier Diversity and Local Spend Awards
Top Performing Tier 1 Diverse Supplier
Top Tier II Diverse and Local Impact Supplier
Supply Chain Q&A
Closing
If you do these things, we will look for every opportunity to grow your business

**Quality – zero defects**
Proactive quick & thoughtful problem solving (5-Why, A3)

**Cost – best in market**
Continuous cost improvement, shared risk, cost per case, margin improvement, contracts aligned around our goals

**Delivery – 100% on-time & complete**
No backorders, no substitutes, distributed when requested, insulate us from your problems while you solve them

**Technology – At The Forefront**
Technology that solves our problems, clinically & operationally, that provides access to relevant data & keeps data safe & protected

**Service – best in class**
Commitment to our long-term success, right people and processes to achieve it, delight our patients and staff
Thank You