Pharmacy Supply Solutions
Civica Rx Overview

Eric M. Tichy, PharmD, MBA
Vice Chair, Pharmacy Supply Solutions
Why Civica Rx?

The Problem: Chronic Generic Drug Shortages

- Shortages impact patient care and safety, lead to delayed or sub-optimal treatments
- Caregivers spend too much time searching for drugs in shortage or developing alternative therapies
- More than 200 drugs have been on the FDA’s drug shortage list during the past several years
- Typical drug in short supply is a generic sterile injectable medication - including anesthesia medications, antibiotics, pain medications, nutrition and electrolyte products, and chemotherapy agents
Causes for Generic Drug Shortages

- **Unsustainably low prices** and **manufacturers exit market** leading to a lack of competition
  - Departures create a fragile pharmaceutical supply chain and leave 1-2 remaining producers with monopolistic power, often dictating price and shorting supply
- **Suppliers moving API production to China**, making it hard to recover from a disruption because the suppliers that were driven out of market need time to ramp up manufacturing
- **Predatory pricing** - “Pharma Bro’s” 5000% price hike
Civica Rx’s Disruptive Approach to Prevent Shortages

Civica Rx - Established in September, 2018

Exists in the public interest as a non-stock, non-profit corporation to address shortages of generic drugs while lowering their cost

Founded by seven leading hospital systems concerned about generic drug shortages, and three philanthropic members passionate about improving healthcare

Committed to transparency, a one-price-for all model, and its membership is open to all

Civica Rx’s #1 Policy: *Do what is in the best interest of patients*
Governing Members

- Mayo Clinic
- CommonSpirit
- Intermountain Healthcare
- SSM Health
- Peterson Center on Healthcare
- Trinity Health
- Providence St. Joseph Health

Founding Members

- Advocate Aurora Health
- Hospital Sisters Health System
- Allegheny Health Network
- Memorial Hermann
- Ochsner Health System
- Baptist Health South Florida
- St. Luke's University Health Network
- UnityPoint Health
- Sanford Health
- Franciscan Alliance

Partnersing Members

- St. Clair Hospital
- MemorialCare
- ASPIRUS
- Christiana Care Health System
- University of Utah Health
- Piedmont Health
- Southeast Georgia Health System
- Spectrum Health
- Baptist Health
- Regional One Health
- New Hanover Regional Medical Center
- Integrity Health

*4 others to announce soon
Civica Rx’s Disruptive Approach

<table>
<thead>
<tr>
<th>Not-For-Profit</th>
<th>Establish Fair And Sustainable Prices</th>
<th>Price Transparency And No Fees or Rebates</th>
<th>Promote Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Guaranteed Contacts</td>
<td>Redundant Manufacturing</td>
<td>Safety Stocks</td>
<td>Transparency Location of Manufacturing Facility</td>
</tr>
</tbody>
</table>

Civica Rx is member-driven and committed to eliminating uncertainty within the supply chain.
Simultaneous Three-pronged Product Supply Strategy

Manufacturing Solution #1:
Work with ANDA holders to produce Civica Rx labeled generic drugs

Manufacturing Solution #2:
Buy or develop ANDAs and use CMOs

Manufacturing Solution #3:
Buy or build Civica Rx manufacturing capacity

Results
1. Prevent Drug Shortages
2. Financial Stability
3. Create certainty
4. Increase competition
Civica Rx’s Role in the Generic Drug Market

1. Bring true competition to the generic market, focusing on value (price and quality)
2. Ensure stable and predictable supply of essential generic drugs, reducing shortages
3. Be the conscience of the market, serving as a check against aggressive pricing behavior of generic drug manufacturers
Civica Rx At Mayo Clinic

• Proactive approach by Mayo Clinic to bringing stability to generic injectable drug market by partnering with a non-profit pharmaceutical organization
• Civica to release 16 injectable medications by the end of 2019
  • Vancomycin and Daptomycin available October
    • Vancomycin has experienced intermittent shortages since 2009
• Mayo Clinic committing 50% of enterprise purchase volume for each medication
  • Negotiating with drug wholesaler to ensure distribution occurs in traditional supply channels with minimal added costs
  • Prices of products from Civica are market competitive – this is not a major cost saving project for the enterprise
Questions & Discussion