Healthcare Supply Chain in Novel Coronavirus (COVID-19) Crisis

Center for Supply Chain Research®, Penn State University
Agenda

- Introduction
- Guest expert
- Breakouts
- Breakouts recap
- Q&A / Open forum
Healthcare Supply Chain (SC) Challenges

Demand Challenges
- Demand spike for COVID-19-related medical supplies
- Demand spike for certain essential drugs
- Stockpiling/Over ordering
- Increases in demand from non-traditional customers, notably for PPE products
- Increases in demand for traditionally low-volume products, notably for Tyvek hazmat suits

Supply Challenges
- Production disruptions
- Export restrictions of COVID-19 related medical products
- Domestic and international freight transport and logistics capacity constraints
- Increase in scams and counterfeit products, notably PPE products
Industry Enabled Stabilization of the Supply Chain
Distributing supplies and equipment to the right place at the right time

**ACCELERATION**
- Identifying foreign/domestic suppliers and speeding deliveries
- Purchasing supplies and coordinating emergency airlift deliveries
- Retooling auto and fashion industry assembly lines

**PRESERVATION**
- Making the best use of critical medical supplies at hand
- PPE stabilization tools, converting ODPs to ventilators

**EXPANSION**
- Enhancing current and new manufacturing capabilities

Source: Supply Chain Task Force, FEMA Whole-of-America Response (2020)
## SC Responding Strategies: Medical Suppliers Collaboration

### Pro-Competitive Collaboration
- Five private medical suppliers:
  - Cardinal Health
  - Henry Schein
  - McKesson
  - Medline Industries
  - Owens & Minor

### Areas of Collaboration
- Manufacturing
- Finding and creating new supply sources
- Monitoring demand
- Distributing supplies to FEMA-designated hotspots
- Monitoring and negotiating pricing
- Sharing various types of data concerned with all of the above functions

### Anti-Trust Consideration
- Department of Justice:
  - Written notice to the Department of Justice is required when the COVID-19 pandemic is resolved.
  - Must state this enhanced degree of cooperation is no longer required and is thereby dissolved.
SC Responding Strategies: Demand-Side Levers

Demand-side levers exercise “preservation” measures that focus on making the best use of supply at hand.

**Reuse**
- Example: Decontamination of N95 respirator masks by Battelle under the contract with the Defense Logistics Agency (DLA)

**Adaptation of existing products**
- Example: Machines used to treat sleep apnea retrofitted for non-critical COVID-19 patients at Mount Sinai Health System in New York

**Domestic demand: Supply allocation**
- Prioritize allocation of critical products to serve the most critical areas and users
- Restrictions on sales and dispensing of essential medicines at risk of shortages or subject to increased demand

**International demand: Export restrictions**
- “Memorandum on Allocating Certain Scarce or Threatened Health and Medical Resources to Domestic Use” issued on April 3, 2020
# SC Responding Strategies: Supply-Side Levers

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<th>DISTRIBUTION AND LOGISTICS</th>
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<td><strong>Non-traditional sourcing channel</strong></td>
<td><strong>Public-private partnerships: Project Airbridge</strong></td>
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<td>- Investments in additional machinery</td>
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<td>- Re-tooling existing production lines</td>
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<td>- Extending operating hours</td>
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<td><strong>Non-traditional manufacturers</strong></td>
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<td>- <strong>PPE production.</strong> Examples: Manufacturing Coalition, 3D printing community, athletic companies, apparel retailers</td>
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<td>- <strong>Human ventilator production.</strong> Examples: Auto makers, Xerox, Dyson</td>
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*** See extended list and web links in CSCR® Snapshot Highlights Week 4/7.***
Project Airbridge: Important Role of Distributors

Project Air Bridge
Stabilizing the Health of People and Supply Chain with Speed

FEMA's Role:
ACCELERATE TRANSPORT OF DISTRIBUTOR SUPPLIES VIA 2-DAY AIR BRIDGE

Data Informed Distribution

Distributor's Role:
PRIORITY 50% OF PPE SALES TO HOT SPOT CLIENTS *based on CDC data
SELL 50% OF PPE THROUGH TRADITIONAL CHANNELS

CONVENTIONAL TRANSPORT 30-40 DAYS

Source: Supply Chain Task Force, FEMA Whole-of-America Response (2020)
Our Guest Expert

Robert Zelis
Senior Vice President of Operations
Amerisource Bergen
Breakouts
STEVE TRACEY

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