PREMIER

Coronavirus Supply Chain Task Force

March 9, 2020

Key Takeaways

Premier's Goals

- Ensure healthcare providers have access to the right drug or supply, at the right time, to treat the right patient
- Maintain supply chain integrity
- Respond with a data-driven approach
- Partner with the Administration and other private sector partners to create both short-term and long-term solutions

Acute Supply Chain

Current State:

- Based on our experience, survey results, and data, the supply chain for PPE is unquestionably strained. This is due to pressures from pre-existing issues (EtO, Cardinal gown recall) and now COVID-19.
- There are 700+ unique PPE products on national allocation across 8 product categories. Hospitals are reporting only receiving 44% of their allocation for N95 masks.
- Items of greatest imminent risk include all masks (N95, surgical, isolation), gowns (surgical & isolation) and PAPRs.
- Inability to obtain product via normal distribution channels creates significant risk for counterfeit products and the gray market.

Future State:

- There are other major risk points in the supply chain that must be monitored.
- There is a next tier of products that could be impacted including: cleaning agents and detergents: sanitizers; air filters; physician preference products (orthopedics, cardiovascular, GI, etc.); IV tubing; pacemakers

Recommendations:

- ***To be successful moving forward, we must create a stronger public-private partnership to triage requests, identify available supply, and create a feedback mechanism to understand when product has been deployed to fulfill requests.*** This can be accomplished by:
  - Continuing to collect and report relevant data to the task force.
  - Convening the GPO and distributor industries to gather similar data and insights across the entire acute and non-acute segments.
  - Supporting the SNS to triage supply requests and distribute product.
  - Support the passage of legislation to create reporting transparency to FDA regarding supply disruptions.

Acute Supply Chain

PPE is a foundational building block for caregivers and manufacturers. A disruption of the current magnitude will unquestionably lead to unforeseen disruptions in other products internal and external to healthcare.

There are 700+ unique products that are on national allocation across 8 product categories of PPE. These categories include:

1. Infection Control Apparel Gowns (AAMI level 1, 2, and 3 Iso Gowns)
2. Surgical Gowns
    a. Non Sterile
    b. Sterile (AAMI level 3 and 4 gowns)
3. Caps
4. Shoe Covers
5. Exam Gloves
6. N95's
7. Surgical Masks (ASTM level 1 procedure masks, ASTM level 1 procedure masks, ASTM level 3 procedure masks, ASTM level 3 surgical masks)
8. Face Shields & Eyewear

Projected Additional Disruptions Beyond PPE:

- Cleaning agents and detergents:
    - Sanitizers
    - Cleaning wipes, bleach, air filters, etc.
- Physician preference products – Orthopedics, Cardiovascular, GI, etc.
- IV tubing
- Pacemakers

Non-Acute Supply Chain

Current State:

- Infections in long-term care facilities (LTCFs) have exposed vulnerabilities in the frail elderly population.
- Supply chain challenges are preventing immediate deployment of PPE and other critical products to these entities.
- Non-acute facilities are not able to obtain adequate levels of supply from traditional distribution channels. This is raising serious concerns about counterfeit products and the gray market.

Future State:

- Non-acute facilities are at the greatest risk of shortages for PPE, disinfectants, and maintenance/repair products

Recommendations:

- ***To be successful moving forward, there is an urgent need to identify a controlled and secure distribution channel for products for non-acute facilities***.
- Premier is prepared to protect and coordinate the supply chain and offer an omni-channel ordering solution for non-acute facilities

Non-Acute Supply Chain

Non-acute facilities are at the highest risk of shortages and rapid product depletion for the following categories

PPE & Medical Supplies

- Disposable non-sterile protective apparel
- Surgical and exam gloves
- Surgical and isolation masks
- Sterile packs and gowns
- Medical thermometers

Disinfectants

- High level disinfectants
- Housekeeping products
- Intermediate level disinfectant wipes
- Room environment infection prevention
- Soaps, lotions and waterless hand rinses

Maintenance, Repair and Operations

- Air filtration products
- Powered air purifying respirators (PAPR)

Pharmaceutical Supply Chain

Current State:

- A lack of transparency in the pharmaceutical supply chain regarding source of raw materials, active pharmaceutical ingredients (API), and finished dose forms (FDF) makes it difficult to assess the downstream risk to drug shortages.
- The pharmaceutical supply chain has not experienced the same immediate impact as the PPE supply chain. Most manufacturers are reporting at least 4-6 months of API on hand.
- Premier has been deliberate in its strategy to ensure its pharmacy portfolio is diversified. The same may not be true for all players.

Future State:

- There are a number of risks to the pharmacy supply chain that must be monitored.
- Should drug shortages increase in number, ensuring a secure and controlled distribution channel is essential to prevent entry of product into the gray market.

Recommendations:

- ***To be successful moving forward, we must leverage the expertise of private sector partners in addressing drug shortages.***
  - Premier is willing to make drug shortage items available nationally to all hospitals if necessary. HRSA would have to provide a waiver as private label drugs are currently prohibited in the 340B program.
  - Utilize a secure and controlled distribution channel.
  - Support passage of legislation to create transparency in the pharmaceutical supply chain regarding source of raw materials, API, and FDF.

Pharmaceutical Supply Chain

The following drug classes are most at-risk at this time for increased demand and hoarding. Many of these drugs are already on the FDA drug shortage list and have a vulnerable supply chain. Premier is actively monitoring the supply chain for these products to identify any warning signals indicating a potential shortage.

- **Antivirals** – lopinavir/ritonavir, ribavirin, acyclovir, oseltamivir, zanamivir
- **Tracheal intubation** – cisatracurium, vecuronium, rocuronium
- **Vasopressors for septic shock** – norepinephrine, dopamine, epinephrine, phenylephrine, vasopressin, dobutamine
- **Fever/pain** – acetaminophen, ibuprofen, aspirin, diclofenac
- **Antibiotics** - vancomycin, piperacillin/tazobactam, cefazolin, doxycycline, sulfamethoxazole/trimethoprim
- **Corticosteroids** – hydrocortisone, prednisone, methylprednisolone, hydrocortisone
- **IV fluids & electrolytes** - normal saline, 3% hypertonic saline, potassium chloride, calcium chloride, calcium gluconate, sodium bicarbonate, sterile water, sodium phosphate, potassium phosphate
- **Oxygen**

