Building A More Robust Supply Chain

Industry Recommendations For A Strong Public-Private Pandemic Infrastructure
Thought Leaders Address Medical Products Supply Chain Resilience

Backdrop: Pandemic Demand Outpaces Supply

1000+% Demand Surge

51B Units of PPE Delivered

Opportunists Wasted Time and Money

A contractor promised FEMA 10 million masks for $55 million. It did not deliver.

Stockpiles Depleted...

Then Replenished

30+ Day PPE Transportation Delays

About Thought Leaders

As the U.S. and the world continue to deal with the ongoing COVID pandemic, leaders from Health Industry Distributors Association and the HIDA Educational Foundation convened to begin the process of extracting learnings from the COVID pandemic.

This group of thought leaders were asked to consider policy recommendations to a fundamental question:

**How can the country improve readiness and response to future pandemics of similar magnitude?**

In developing these recommendations for consideration by government policymakers and leaders across healthcare, a consensus has emerged. A public-private partnership model where government and the commercial supply chain leverage each other’s resources and strengths is the path to creating a more robust and resilient healthcare supply chain.

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President & CEO Health Industry Distributors Association
EXECUTIVE SUMMARY
Goals and Objectives for Supply Chain Readiness

#1 Build A Bigger Cushion
OBJECTIVE: Fulfill providers’ initial demand while giving critical time to ramp up manufacturing production
• Absorb the first wave of pandemic demand
• Think beyond conventional stockpiles
• Establish a core critical supply list

#2 Establish A National Sourcing Strategy
OBJECTIVE: Establish capacity to quickly ramp up medical supply production
• Increase U.S. manufacturing of critical medical supplies
• Enable U.S. surge manufacturing
• Prioritize transportation for PPE and other pandemic supplies
• Diversify global sourcing

#3 Ensure Supply Chain Readiness
OBJECTIVE: All participants understand roles, expectations, and connection points to access products in an emergency
• Develop structured communications protocols
• Ensure that providers understand how to access products
• Embrace supply chain best practices
• Partner with proven, experienced companies
#1. Build A Bigger Cushion

Fulfill providers’ initial demand while giving critical time to ramp up manufacturing production capacity.

Pandemic demand for PPE and other essential products rises very quickly and unexpectedly. Providers’ first call for product is to their distributors, so product reserves should be dispersed at distribution warehouses across the country. Maintaining a larger buffer of medical supply reserves in private-sector distribution centers is required to meet providers’ immediate needs while giving the supply chain critical time to adapt.

“A bigger cushion gives us more time to react.”

“To have a cushion, manufacturers will need to produce more than they can sell and distributors to store more than their customers need.”

Absorb the first wave of pandemic demand

Supplies must be easily and rapidly accessible to the nation’s 500,000 provider sites to fulfill their needs until additional manufacturing can come online.

- The Federal government should contract or fund distributors to increase inventory levels for PPE and other critical supplies at 500 locations around the country.
- Distributors should be funded to carry up to 90-120 days’ supply of an agreed upon critical supplies list, instead of the typical 30 days.
- Distributors will keep inventory current by monitoring expiration dates, rotating, and replenishing these buffer reserves as needed.

A 90-day PPE supply for a single 350-bed hospital requires

5700 square feet of storage space.
Think beyond conventional stockpiles
Product reserves are important, but they must be sustainably funded, carefully managed, and closely coordinated.

• Fully fund, expand, and replenish the Strategic National Stockpile.
• Coordinate Federal, state and private stockpiles.
• Define the replenishment strategy for stockpiles during time of pandemic.

Establish a core critical supply list
Having a pre-established list of critical PPE and emergency supplies will inform stockpile decisions and facilitate planning.

• Develop consensus on a set of core products.
• Prioritize ongoing availability of products over brand preferences.
• Enable providers to plan ahead for product substitutions required during a crisis.

“The critical products lists needs to include not only PPE, but also diagnostic tests, infection prevention supplies, and treatment products.”

500 Existing Healthcare Distributor Warehouses
76 Million Sq. Ft. Warehouse Space
#2. Establish A National Sourcing Strategy

Establish capacity to quickly ramp up medical supply production.

No stockpile could be big enough to prepare the entire country for a lengthy pandemic. The country must be prepared to quickly ramp up both domestic manufacturing and global sourcing.

Increase U.S. manufacturing of critical medical supplies

Most PPE is made outside the U.S. Increased U.S. production would decrease vulnerabilities to global disruptions.

- Expand U.S. and nearshored manufacturing capacity.
- Use federal purchases and multi-year contracts to support the long-term commercial viability of domestic manufacturing.
- Consider subsidies to help U.S. manufacturers be competitive in a robust market.
- Prioritize established, experienced companies to receive government support to on-shore production.

Enable U.S. surge manufacturing

The ability to replenish inventories at pandemic-level quantities throughout a crisis is essential.

- Develop funding mechanisms, loans and other incentives to boost production capacity.
- Establish an idle manufacturing strategy to ensure that additional production lines can go live quickly during a crisis.
- Stockpile raw materials for critical supplies.

“Any incentives the government puts in place for domestic manufacturing must be designed for the long term.”

From: Overdependence
To: Sustainable Blend Of Sources

Future State
- No single foreign country supplies majority of any product
- Mix of global, near-shored, and domestic sources
“Just because you have U.S. manufacturing doesn’t mean you have surge capacity: access to raw materials is key.”

“It’s more about product availability and less about where product is made.”

**Public-Private Supply Chain Partnership**

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<thead>
<tr>
<th>Private Sector Role</th>
<th>Government Role</th>
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<tbody>
<tr>
<td>• Provide visibility to product manufacturing: country of origin, raw materials</td>
<td>• Support domestic manufacturers</td>
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<td></td>
<td>• Incentivize idle capacity</td>
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<tr>
<td></td>
<td>• Use trade agreements, business incentives, and other strategies to diversify sourcing across multiple countries and regions</td>
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**Prioritize transportation of PPE**

The U.S. will remain reliant on globally-sourced medical products for some time. In a pandemic, critical products like PPE should have priority access to port, rail and truck transport.

- Create a “fast pass” system to align ports, rail, trucking, and distribution centers so PPE in the U.S. is expedited in front of less critical cargo.
- The entire transportation system (port, rail, truck) must be aligned around 24/7 operations during a pandemic.

**Diversify global sourcing**

The U.S. should reduce its dependency on certain geographies and regions for key categories of medical supplies.

- Establish a more strategic blend of domestic and global sources.
- Understand country of origin for products and raw materials.
- Identify areas of overdependence and use trade agreements, business incentives, and other strategies to diversify sourcing across multiple countries and regions.
#3. Ensure Supply Chain Readiness

All participants understand roles, expectations, and connection points to access products in an emergency.

It’s critical to establish clear processes for quickly delivering products to the provider locations where they are needed most.

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Develop structured communications protocols

Lines of communications between government and industry at the operational level should be established in advance.

- Identify clear point of contact for each entity in the public-private partnership.
- Streamline the process to avoid competition for the same products.
- Identify and clearly communicate the trigger for accessing the supply chain cushion and government stockpiles, and for ramping manufacturing.

Ensure that providers understand how to access products

Providers and public health understand the supply chain infrastructure that serves them and how and where to go for critical pandemic supplies.

- Address the entire healthcare delivery system from hospital, nursing home, physician office and home care.
- Address underserved healthcare segments in urban and rural settings.
- Communicate role of stockpiles – who gets what, and how products are accessed.

“We must streamline the process so that states are not competing with each other and with the federal government for product availability.”
## Public-Private Supply Chain Partnership

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<tr>
<td>• Deliver products to providers</td>
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<tr>
<td>• Provide timely information on product availability</td>
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<tr>
<td>• Vet new sources</td>
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<tr>
<td>• Clearly identify each agency's role in pandemic response and supply chain coordination to communicate as one voice</td>
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<tr>
<td>• Establish and communicate protocols for accessing government-owned product reserves</td>
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<tr>
<td>• Identify hotspots and unmet needs</td>
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### Coordinate state, federal and private stockpiling

Pre-determined processes will prevent panic buying that leads to shortages, counterfeiting, and fraud.

- Encourage providers to maintain emergency reserves — but not large private stockpiles.
- Identify acceptable substitutes for critical items.
- Engage in tabletop exercises but work together to test these plans through drills and exercises.

### Partner with proven, experienced companies

Criteria for supplier selection should include healthcare experience.

- Contract with companies that have protocols, monitor regulatory compliance, and vet suppliers carefully.

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“A lot of folks got burned with counterfeit products or other scams.”

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**The New York Times**

*He Had Never Sold a Ventilator. N.Y Gave Him an $86 Million Deal.*

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**The Washington Post**

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