



# The New Health Care Supply Chain Mandate

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- 1 A call to action for health care's supply chain
- 2 Where are we now?
- 3 Moving forward: Five elements of a modern health care supply chain

# 01

## A call to action for health care's supply chain

# Not all press is good press

The Modern Supply Chain Is Snapping  
*The Atlantic, March 19, 2020*

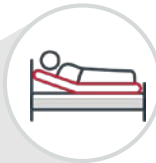


Begging for Thermometers, Body Bags, and Gowns: U.S. Health Care Workers Are Dangerously Ill-Equipped to Fight COVID-19  
*TIME, April 20, 2020*



As Coronavirus Hospitalizations Surge, Ventilator Manufacturing Ramps Up— but Not Quickly Enough

*The Wall Street Journal, April 4, 2020*



Fear of Vial Shortage for Covid Vaccines Prompts Flurry of Deals

*Bloomberg, June 25, 2020*



Months Into Virus Crisis, U.S. Cities Still Lack Testing Capacity

*The New York Times, June 6, 2020*



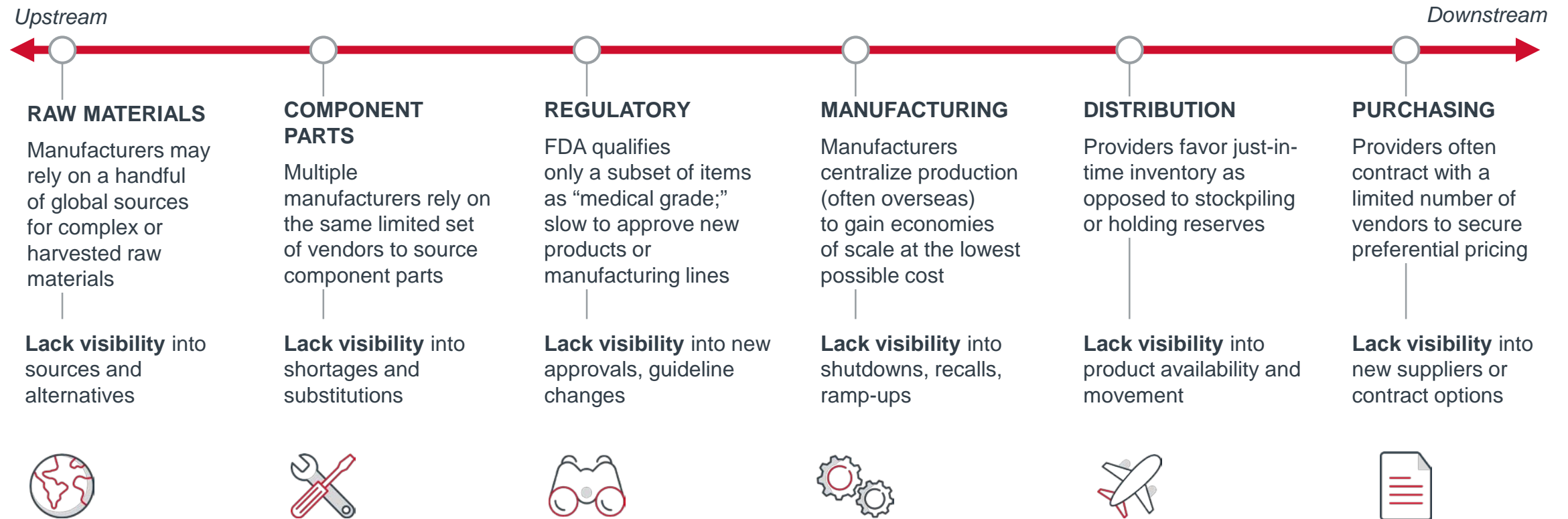
'Swept Up by FEMA': Complicated Medical Supply System Sows Confusion

*The New York Times, April 6, 2020*



# Supply chain “efficiencies” created a fragile system

## Factors that limit flexibility across the health care supply chain



# Increasing visibility can enable an efficient, flexible supply chain



## The perceived dilemma

Organizations must sacrifice resiliency to optimize efficiency. A more resilient supply chain is a more expensive supply chain.

## The emerging reality

Improvements in upstream and downstream supply chain visibility – with strong commitments to share data among trusted trading partners – can unlock opportunities to reduce waste *and* increase flexibility.



# It's time for a supply chain revolution

## Supply chain needs the support of executive leaders...

Q: Which leaders, outside of the supply chain function, are most essential to your organization's ability to improve the supply chain? (n=60)

- Chief Financial Officer (72%)
- Chief Executive Officer (48%)
- Service line leaders (38%)
- Chief Medical Officer (37%)



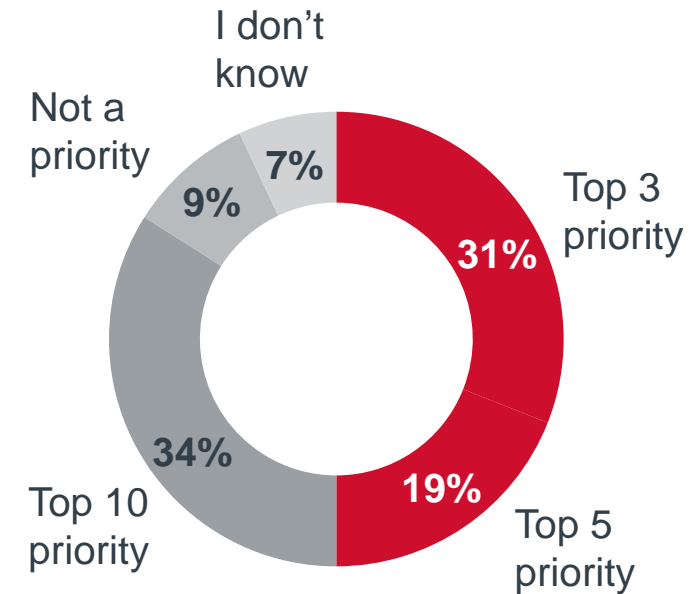
SPOTLIGHT

“Prior to the pandemic, supply chain was “too close to the basement,” but our response and approach have elevated our team. **We finally have a seat at the executive table - and we're here to stay.**”

*VP supply chain, Mid-size health system*

## ...And it's capturing their attention

Q: Where does improving your supply chain fall on your organization's priority list? (n=68)



Source: Advisory Board 2020 Health System Supply Chain Strategy Survey.

# Early interventions reveal instinct to take more control

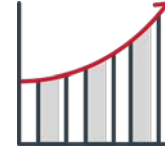


## BUY AMERICAN

Aims to reduce the risk of supply shortages by curbing our reliance on manufacturing and product sourcing outside of the country

### PITFALLS

- Limited impact on short-term needs, as this requires significant time to build new manufacturing capacity
- Likely to increase prices due to higher U.S. production costs
- Unlikely to fully break reliance on non-American sources, particularly for raw materials and component parts



## INCREASE STOCKPILES

Aims to reduce the risk of shortages for individual health systems by building up and maintaining large quantities of critical supplies

### PITFALLS

- Requires significant cash outlays to purchase large quantities of supplies and then store them off-site
- Extends health systems beyond core competencies, likely necessitating additional inventory management resources and increasing risk of waste if not well managed
- Reinforces organizational silos and hinders suppliers' or distributors' ability to optimize storage and logistics for many customers at once

Source: "Trump order seeks to boost America's domestic medical supply chain – but could it lead to higher costs?" *The Daily Briefing*, August 7, 2020, Advisory Board.



# Five core elements of the new health care supply chain

*Imperatives for change*

*Characteristics of the modern supply chain*

1

Strategic supply chain organization

2

Adaptive demand planning

3

Integrated inventory management

4

Radical cross-sector transparency

5

Friction-free collaboration



*Internal transformation*

*Industry-wide transformation*



# 03

## Moving forward: Five elements of a modern health care supply chain

# Five core elements of the new health care supply chain

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# Lack of investment and integration limit demand planning success

## Health system barriers to demand planning for medical supplies



### *Lack of investment*



Health system supply chains haven't invested in **IT solutions that can help predict demand**



Few organizations have **FTEs<sup>1</sup> within the supply chain dedicated to modeling and monitoring demand for medical products**

### *Lack of clinical integration*



Supply chain is **not aligned with clinical planning or demand forecasting**



Limited **interoperability between EHRs and ERPs<sup>2</sup>**

1. Full time employees.

2. Enterprise resource planning.

# Clinician-centered tech reveals true supply need

## Visualizing impact of poor demand planning



Common supply challenges in the OR:

- Stockouts
- High rate of expedited shipping
- Expired goods
- High levels of supply waste
- Hoarding
- Clinical teams overmanaging inventory



Root cause:

Inability to accurately predict clinician need

## Standvast's supply chain improvement technology addresses root cause of demand planning challenges

**Engages clinicians** as first step in supply chain transformation; seamlessly identifies all products needed for targeted cases



**Forecasts clinician need** and enables reliable access to supplies:

- Integrates with existing data infrastructure to provide visibility into product use
- Layers in vendor delivery performance to forecast and manage when products will arrive, optimizing in-stock amounts
- Uses AI/ML<sup>1</sup> to forecast product demand and inform par levels
  - Pilots indicate ability to anticipate product demand with 98% accuracy four weeks in advance and ensure best-in-class in-stock levels one week in advance

**Reports data back to clinicians** and hospital leaders to inform and drive change in supply chain processes, improve contract compliance, and reduce variation

1. Artificial Intelligence/Machine Learning.

# Ongoing clinician-supply chain collaboration is critical

## Example: Centura's Med-Conservation Work Group



- Established by health system leadership in response to Covid-19
- Comprised of pharmacy, supply chain, and clinical leaders
- Developed pharmaceutical contingency plans and helped inform drug purchasing during Covid-19
- In the long-term, Centura will leverage the success of this group to ensure continued communication between clinicians and pharmacy/supply chain

## Benefits of a clinically-integrated supply chain

- 1 Builds trust between supply chain and clinicians**  
Clinical leaders can better understand and communicate the “why” behind supply chain changes

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- 2 Helps supply chain anticipate changes in demand**  
Clinicians can highlight trends they see at the bedside that don't yet appear in data

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- 3 Informs ongoing risk mitigation efforts**  
Supply chain leaders and clinicians together can identify alternative medications or supplies to order in case of shortages

# Time to move from annual to iterative scenario planning

## Annual forecasting and planning



Annual forecasting to inform budgets and investment strategy



Considers one future; no impact or sensitivity analysis done on forecasted volumes



One set of plans and investment recommendations regardless of reality



## Continuous forecasting and scenario planning



Rolling forecasting (frequency can vary based on climate uncertainty)



Considers multiple futures; modifies impacts with varying rates of change for various outcomes



Encourages development of multiple strategies to address various futures, creation of if-then contingency plans; enables quick course correction



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