



## **AHRMM Learning Community: Solution Sharing Open Forum The Health Care Supply Chain's Response to COVID-19**

AHRMM works closely with federal government agencies, providers, suppliers, and distributors to help coordinate a response to the COVID-19 crisis to find creative solutions to supply chain issues, and share the most up-to-date information with the community. On Friday, March 27, the AHRMM Learning Community hosted the "Health Care Supply Chain's Response to COVID-19" open forum to discuss the challenges supply chain has come up against and the ways they have been overcome.

Moderated by Mike Schiller, senior director of supply chain at AHRMM, all attendees were asked to respond to questions that were submitted prior to the event. Below is a summary of that discussion with over 250 supply chain professionals, working all areas of health care service such as providers, suppliers, GPOs, consultants, etc.\*

### **Question 1**

**How are you managing spikes in supply-use due to practice changes and how are you conserving PPE and other essential supplies? How many people are referencing CDC site and the FDA guidelines?**

### **Answer**

#### **Website Resources:**

- [AHRMM COVID-19 resource page](#)
- [COVID-19 Healthcare Coalition](#)
- [COVID-19 Resources for Providers UofNebraska](#)
- [Information for Healthcare Professionals CDC](#)
- [Resources for Clinics and Healthcare Facilities CDC](#)
- [Emergency Use Authorizations FDA](#)

#### **N95 re-sterilization Resources:**

- [N95 Filtering Facepiece Respirator Ultraviolet Germicidal Irradiation \(UVGI\) Process for Decontamination and Reuse U of Nebraska and Key Points](#)
- [Hydrogen Peroxide Vapor sterilization of N95 respirators for reuse](#)
- [Evaluation of Decontamination Techniques \(HCC\)](#)
- [Georgia Tech: 3D-printed face-shields \(Not yet FDA approved\)](#)

#### **Use of Expired but Serviceable PPE:**

- Conducting inspections of expired PPE; testing expired hand sanitizer (developing test using ASTM (with CFR) standards—will share when complete (US Army Regional Health Command Atlantic: Sharing Practices)
- Communicating safety standards of expired PPE to front-line care workers and leaving final decision up to hospital directors/commanders

### **Closely monitoring PPE usage system-wide:**

- Report daily log-status of top 5 products
- Pandemic PPE Assemblage stationed at every care location, providing reserve stock
- Daily communication to cross-level and rebalance PPE based on patient load, health protection status, and epidemic heat maps

### **Reducing PPE Waste**

- Temperature probe checks: if you do not touch a patient directly, it is not necessary to change gloves
- Bringing IV pumps out into hallways in order to reduce the number of gown/glove/mask changes

### **Question 2**

**What can you share about supply chain upstream visibility, allocation strategies, and supply availability?**

#### **New and Non-traditional suppliers**

- AHRMM, in collaboration with GHX, is acting as clearing house, vetting and compiling lists of non-traditional suppliers. [AHRMM COVID-19 resource page](#)
  - Hospitals should still adhere to their own vetting standards
  - Open to collaboration with those who are also performing large-scale vetting
- The Exchange
  - Allows for hospitals to coordinate supply and pool resources: know what products are needed and what products can be shared
- HospitalPrepare.org
  - Xcelrate UDI is offering their *UDIInventory* at no cost to hospitals. This program is spediSupply UDI and equipment barcodes are easily scanned and identified in order to exchange, borrow, or loan
- Sourcing products from China:
  - Hand sanitizer: high volume orders (14-20k units) that have to be shipped (30-45 days)
  - Other PPE can come in over air (7-10 days)
  - Feds pushing back; want “Made in USA”
- TRIOSE
  - Assisting hospitals in getting product through customs and secure product at lower freight costs (esp. as more large cargo shipments are being routed)
  - Working with new vendors coming to market
- CME Corp
  - Hearing from some manufacturers that they are paying premium prices to expedite shipping materials in for production and they are starting to pass those charges on to the supply chain.

### **Question 3:**

**Have people begun to explore the use of a single ventilator for multiple patients?**

- As a last resort due to potentially severe consequences
  - Patients have differing lung dynamics that lead to unequal ventilation
  - May result in increased health worker stress

- Labor intensive
- Routine of disconnecting tubing to suction the ETT and reconnecting would become mentally and physically exhausting pretty quickly
- At least double the number of alarms requiring immediate bedside attention by a nurse and/or respiratory therapist.
- Proposal: Manual ventilation
  - “I’m inspired by the number of retired health care professionals that have committed to coming in to help. With the extra hands, it might be feasible to use a bag to manually ventilate a patient for several minutes and then be relieved by another professional in a repetitive fashion. We used to manually bag ventilate a patient to “see what they liked” and then approximate those settings into a mechanical ventilator. Perhaps the reverse can be done now: use a ventilator to determine what the patient’s respiratory system “likes”, then approximate that by manual bag ventilation. The ventilator could then be flash sterilized and used for the next patient, and so on.”

#### **Question 4**

##### **Are there any concerns about raw material shortages?**

- Raw materials for multiple manufacturers are often sourced from a single company, as the chain narrows further upstream. This potential weakness is being monitored.
- Cook Medical has not seen any shortages in raw materials as of yet but continues to monitor the situation closely
- R-Water manufactures a device that produces a one-step disinfectant that is effective against COVID-19, C. diff, TB and more in one minute. The disinfectant is generated on-site, so it will not run out.

#### **Question 5**

##### **Have any of the hospital organizations worked with local or state EMAs in order to access strategic stockpiles?**

- Article explaining the Strategic National Stockpile (SNS):  
Amid mounting shortage, 5 facts about the nation's stockpile of emergency medical supplies
- “In Illinois there are stockpiles throughout the state. While it has been effective (primarily with N95 and isolation gowns), the state needs to conserve resources and supply many hospitals.”
- “In Georgia, the Department of Public Health is the lead agency planning the receipt and distribution of product from the SNS. We, as a facility, have begun requesting resources through our state agency/EMA. Our state warehousing team performs allocations based on state-provided priorities, etc. We have thankfully received a small amount of N95s as the result of our request. We continue to submit requests on a weekly basis.”
- “As an organization in a rural area, we are working closely with our Public Health Department which is representing us to FEMA and the state and federal government. We are pretty low on their priority list however.”

#### **Question 6**

##### **How are you calculating burn-rate of PPE? Do you have any forecasting tools that you are using (based on upstream visibility, on hand inventory, patient census)?**

- [CDC burn-rate calculator](#)
- [Z5 Inventory Offering program for free, allowing providers to count PPE and track use.](#)

### **Question 7**

**Can you share examples of how supply chain is collaborating with the local community?**

- [IHaveAMask.com](https://www.IHaveAMask.com)
  - Individuals are reporting mask stocks that they have in order to get them to health workers
- [100 Million Mask Challenge](#)

### **Question 8**

**How are you managing the massive surge in email and other communications?**

- HealthTrust has reorganized staff into work-streams (each addressing specific aspects of the disease) and set up dedicated email inboxes. Staff triage and forward email to appropriate work-stream
- “We were so inundated with calls and emails we set up a county-wide email and the local public health agency is doing the intake and then distributing.”

\*Always consult your local hospital requirements, clinical guidelines for COVID-19 safety or applicable CDC guidelines for additional information or guidance on securing alternative PPE

The listing of suppliers or products is for informational purposes only, and in no way constitutes or should be viewed as an endorsement by AHRMM or the American Hospital Association.