INTRODUCTION

As health care emerges from the COVID-19 pandemic, supply chain resiliency is a priority. One primary consideration has been how to develop inventory reserves to mitigate the risk of severe product shortages. AHRMM convened a group of health care thought leaders and supply chain professionals who explored various ideas and solutions to increasing the resiliency and flexibility of the health care supply chain, including the development of holistic strategies to support inventory reserves, production capacity to meet increased demand and building increased flexibility across the existing supply chain infrastructure from the point of manufacture to the point of use.

SHORT-TERM STRATEGIES

Policy Development & Activation across the entire supply chain continuum that promotes production of PPE and other critical supplies and medical devices in the U.S. Policy development could include tax incentives, subsidies, committed contracts and quotas for the percentage of domestically manufactured products purchased.

Development of clinically-acceptable substitution lists that enable health care organizations to proactively identify products within the same product category in the event of shortages. Development of such lists is facilitated through the use of a standard product identifier like the UDI Device Identifier (UDI-DI) in combination with a classification system like the Global Medical Device Nomenclature (GMDN).

Build a national inventory distribution network utilizing the approximately 500 distribution centers located across the country. By utilizing this existing infrastructure, we can help fulfill needs from large integrated delivery networks (IDNs) to rural/safety net hospitals. This network could include multiple sourcing channels as well as local and community-based businesses.

Post-COVID education that outlines appropriate product use in specific environments and acceptable conservation strategies with documented evidence shared with the clinical community. Education in the midst of a pandemic is impractical, but as we emerge from the pandemic, this is an ideal time to collaborate with clinicians to develop strategies to adopt during pandemic and disaster situations.

LONGER-TERM STRATEGIES

The task force identified the following longer-term strategies which they considered to be more resource or time-intensive.

Transparency as to available supply can be enhanced through the use of existing EDI transaction sets most commonly used currently in the pharmaceutical supply chain. While adoption of these EDI transaction sets will be fairly straightforward within the distributor setting, adoption and implementation within hospitals and ERP systems will take more time.

- The EDI 852 Product Activity dataset enables buyers to tell suppliers how much product they have left in inventory
- The EDI 846 Inventory Inquiry/Advice dataset enables sellers to tell buyers how much the seller has available to sell and can enable buyers to know if a product is backordered

Shared, cloud-based inventory platforms could increase transparency to supply availability and help to align supply with demand on a regional or national scale. This could either be a single platform where supply chain stakeholders contribute data, or a highly integrated series of platforms. The common goal would be the same however; to show available inventory across the entire health care field with the ability to move supplies from low use to high need areas.
In addition to supplies, these platforms could include other resources such as equipment and trained personnel. Communication and collaboration across major stakeholder groups, interoperability and a governance structure would be required to create this multi-faceted virtual network. A review of existing or proposed regulations to avoid unintended consequences would need to be incorporated in the development of any cloud-based inventory strategies.

**CONCLUSION**

In the end, the above ideas could provide the foundation for a global, “control tower” approach to better managing the U.S. health care supply chain, building resiliency, visibility and multi-directional transparency across the supply chain continuum. This coupled with technology and cloud-based inventory platforms could provide us with the unprecedented ability to effectively manage and move critical products, supplies, equipment and staff to those areas most in need.

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