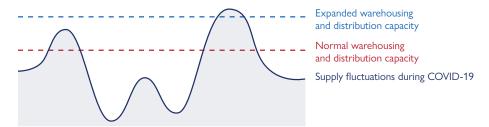
Congratulations! In the face of an unprecedented global pandemic, you acted quickly to prepare your countries and your communities for COVID-19 and ensure that other public health programs can continue to operate. You and your colleagues are working on – or have already – completed tasks like moving health commodities closer to health facilities, optimizing storage space at all levels of the supply chain, using containers as temporary storage, integrating COVID-19 commodities into your logistics management information systems, and much more.

Situations like COVID-19 tend to reveal and amplify weaknesses in existing supply chain systems, providing the opportunity to strengthen those systems for both short-term and long-term benefit.

Now is the time to begin long-term planning with all supply chain partners. For the next unknown number of months, your public health supply chain will operate in ways that we typically try to avoid. To prepare for COVID, we've created an artificial wave of commodities from the central level all the way down to local depots and health facilities. In many countries, central medical stores are looking unusually empty while storage facilities down the supply chain are bursting at the seams.

As you await new deliveries – many of which are delayed – from China, Europe, India and elsewhere, you are probably concerned about the possibility of shortages and even stockout of some commodities at some health facilities.

Eventually, we may see waves of supply to meet pent-up demand, at times in small quantities and at other times in potentially overwhelming volumes that could stress your supply chain systems. If this happens, the key to your success will be in working closely with all partners to ensure that every level of your supply chain is prepared to handle the waves of commodities heading your way.



Consider the following advice and actions to support scenario planning for potential adverse events and development of strategies to mitigate them. You will already have thought of many of these, and some may not apply to your situation. Take what's useful and disregard the rest:

#### **GATHER AND USE DATA TO DRIVE STRATEGY**

In uncertain times, quality data is essential for effective response. Lags in data can compound the challenge of data use, and understanding what data to use and what to ignore can also be difficult. Consider the following advice and actions:

- Focus on leading indicators to determine anomalies in consumption at sites. For example, test kit consumption is a leading indicator for pharmaceuticals for treatment.
- Contact a random sampling of health facilities to understand changes in patient behavior that can impact demand. Are patients staying away from health facilities out of fear of COVID-19, and how is that impacting consumption? Are patients switching family planning methods to reduce frequency of visits? Which commodities are being dispensed through multi-month prescriptions that were not before?
- Focus on things that don't look right. For example, does your distribution data align with what you're seeing in physical inventory and distribution?

 Detect anomalies (data points that are outside of the norm, such as interruptions in deliveries from suppliers) and focus on them rather than data that appear normal.
 GHSC-PSM has developed open-source anomaly detectors that can be quickly adapted for use. Contact us at PSMHHSOperations@ghsc-psm.org for more information.

## SUPPORT EQUAL DISTRIBUTION OF COMMODITIES AT HEALTH FACILITIES

To help avoid shortages and stockout at health facilities due to global supply interruptions, consider the following actions:

- Prepare now to closely monitor supplies at health facilities and identify those with shortages and those with excess supply.
- Make improvements or necessary changes to logistics management information systems and processes.
- Increase the frequency and lower the quantity of deliveries of central stock to better manage an equal supply while stock levels are limited.







- As needed, reallocate stock among health facilities to maintain supply.
- Discourage hoarding by communicating clearly and often the actions you are taking to ensure a reliable supply.



# PREPARE CENTRAL WAREHOUSING TO MANAGE LARGE VOLUMES

Once supplies become available, commodities may arrive from international suppliers

in larger-than-usual volumes. To avoid overwhelming central and regional warehouses, consider the following actions:

- Determine the availability of private- and public-sector warehousing to serve as surge support. Put in place the contractual and legal frameworks to mobilize quickly when needed.
- Continue to use shipping containers as temporary storage, while managing temperature variations.
- Consider the use of tents as temporary storage, receiving and dispatching.
- Consider bypassing central warehousing and position stock farther down the supply chain.

#### PREPARE FOR INCREASED COLD CHAIN CAPACITY

Increased volumes of deliveries may also include commodities requiring cold storage. To provide surge support for cold chain, consider the following actions:

- Determine the availability of private- and public-sector cold storage to serve as surge support. Put in place the contractual and legal frameworks to mobilize quickly when needed.
- Consider the use of refrigerated containers as temporary cold storage. Plan for where to locate them and how to provide energy.

#### **CONSIDER CHANGES TO KITTING OPERATIONS**

Many countries now distribute health commodities in kits to optimize distribution and use. However, interruptions in supply of specific kit components may hinder distribution. Consider:

 Determine what changes to kitting operations can happen when faced with interruptions in supply of individual components.



### INCREASE DISTRIBUTION CAPACITY

When unusually large quantities of supplies reach your country, distribution systems may not be prepared to manage the volume.

To delivery quickly to the health facilities in need, consider the following actions:

- Maximize distribution capacity of existing fleets by employing a volumetrics approach. For more, see the video here: https:// www.ghsupplychain.org/volumetrics
- Investigate ways to provide surge support through privatesector service providers and other non-governmental aid agencies. Establish the necessary contractual and legal frameworks to quickly mobilize when needed.

#### PLAN FOR WASTE DISPOSAL

During emergency response, countries at times receive commodities they are unable to use for various reasons, including damage, inappropriate labeling (wrong language), lack of approval by local regulatory agencies and more. Health facilities may also have expired products if patients avoid going to them out of fear of contracting COVID-19. To prepare for the potential of unusual volumes of waste, consider the following actions:

- Develop a plan to identify, sort and store waste.
- Develop a plan for reverse logistics.
- Consider recycling of appropriate waste.
- Decide which, if any, waste can be disposed of locally and which must be shipped internationally.

More guidance materials are found at

https://www.ghsupplychain.org/ESC-Preparedness-Response

For more information, contact

PSMHSSOperations@ghsc-psm.org