Impact of COVID-19 Supply Chain Disruptions and Increased Costs on DME Suppliers

A Survey of Companies
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Table of Contents

Executive Summary ........................................................................................................1
COVID-19 has Upended Healthcare with Unprecedented Velocity ..........2
CMS Policy Responses to Date .....................................................................................3
Summary of Key Findings ...............................................................................................4
  Findings on Delays and Supply Chain Interruptions ..............................................4
  Findings on Incurring Increased Costs ......................................................................6
  Companies Incurring Additional Operating Expenses ...........................................8
Detailed Study Findings .................................................................................................10
  Personal Protective Equipment (PPE) .................................................................10
  Respiratory Equipment .........................................................................................10
  Hospital Beds .........................................................................................................11
  Support Surfaces .....................................................................................................12
  Enteral Nutrition .....................................................................................................12
  Negative Pressure Wound Therapy Pumps and Supplies ....................................12
  Patient Lifts/Seat Lifts .............................................................................................12
  Wheelchairs .............................................................................................................13
  Walkers .....................................................................................................................13
  Medical Supplies .....................................................................................................13
Conclusion .....................................................................................................................14
Executive Summary

On Friday, March 13, 2020, President Trump declared a national emergency due to the coronavirus disease (COVID-19). Hospitals, especially in major metropolitan areas, had been experiencing surges in the number of patients admitted to intensive care units with acute respiratory distress syndrome (ARDS). As the pandemic continues to ravage a nation still grappling with vast uncertainty over the characteristics and transmissibility of the virus, DMEPOS (durable medical equipment, prosthetics, orthotics, & supplies – DME for short) suppliers are faced with mounting challenges in serving their patients, many of whom have become suddenly very ill, requiring respiratory support and other DME and related services.

At the same time, healthcare workers and DME suppliers are at considerable risk of contracting the virus through their daily work caring for patients. Patients with the virus who exhibit less severe symptoms are as a matter of practice encouraged to utilize home-based care. In many cases, having access to appropriate DME items (e.g., oxygen, ventilators, respiratory assist devices, CPAPs, and nebulizers) means that the patient can remain at home and avoid the risks of hospitalization. This is particularly important for those with COVID-19 who would receive appropriate care at home while freeing hospital beds for more severe cases, and for those with other respiratory ailments who would minimize their risk of exposure to the virus by receiving care in their homes.

As a result of the public health and economic emergencies associated with COVID-19, DMEPOS suppliers have experienced supply chain interruptions such as significant delays and order cancellations in receiving their equipment and supplies. In addition,

A one-year delay of CB 2021 would help ensure that there are no unnecessary or inappropriate barriers to patients being able to access home respiratory products, hospital beds, and other needed supplies and home medical equipment due to COVID-19 market dislocation.
manufacturers and distributors have levied surcharges and passed along increases in their costs in response to the COVID-19 pandemic. Finally, in an effort to keep their employees safe, suppliers are incurring additional operating expenses such as utilizing personal protective equipment (PPE), providing IT equipment for staff to work remotely, or obtaining additional vehicles to make DMEPOS deliveries.

To understand the magnitude of these impacts upon their industry, AAHomecare fielded a survey of DMEPOS companies this April. Reflecting the urgency of the situation, over 500 unique companies responded within one week. The survey was designed to identify the ways that suppliers have adapted their operations in 2020 to accommodate supply chain disruption, as well as the magnitude of extra costs they incurred as they respond to the COVID-19 public health emergency. Open-ended responses were also collected which afforded respondents a way to provide detail on the various points concerning specific kinds of losses.

This report contains the quantitative findings from the survey as well as narrative answers that describe the changes COVID-19 has brought, such as the financial devastation from respondents having to close retail showrooms and stores. Both quantitative and qualitative responses indicate an urgent need for a postponement of the 2021 Medicare Competitive Bidding (CB) Program scheduled for implementation on January 1, 2021. This postponement will be even more essential if another COVID-19 peak arrives in the fall as many models are currently forecasting.

**COVID-19 has Upended Healthcare with Unprecedented Velocity**

Given the uncertainty COVID-19 has introduced to all aspects of healthcare delivery, it is important to recognize that the conditions under which the bids were constructed in 2019 no longer exist. Current costs and availability of products are no longer predictable and bear no relationship to 2019 costs and availability. Therefore, moving ahead with CB based on out-of-date market information has no economic justification. If the cost of goods sold rises, while at the same time the CB payments are limited by both an earlier out-of-date price determination as well as the consequences of the bidding process, the DMEPOS industry could face severe dislocation and Medicare beneficiaries will lose critical access to often life-saving DME. Suppliers are being financially harmed due to circumstances well beyond their control. They are no longer able to project either their costs, or the level and stability of revenue streams associated with delivering product to patients.

Concerning the challenge of staying in business, one respondent noted, “Lost business in

“We have had a significant decline in patient contact lines of business - example, CPAP setups have nearly completely stopped because we do not have adequate PPE to protect ourselves and the patient while conducting a CPAP setup. We are also experiencing business losses for non-hospice type DME because patients are not going to the doctor to get things like walkers, CPAPs, wheelchairs, etc. due to local quarantines in effect. This also creates payroll issues because I have less business, but don’t want to lay off workers - so I’m trying to keep staff employed, with significant declines in business. I need the staff for when we start to loosen restrictions on patient contact/social distancing.”

Survey respondent
PAP therapy due to sleep lab closure, lost business in compression therapy due to elective surgery cancellations, and lost business in retail sales due to foot traffic decrease from the Stay at Home Order.”

Furthermore, without the fundamental security that the supplier can acquire items at realistic and feasible costs, determining an accurate bid amount for a lead item in any of the product categories will not be possible going forward, at least in the short term.

Factors like anticipated costs (both direct and indirect) for the lead and non-lead items, as well as historic and anticipated utilization of the non-lead items have changed significantly since 2019, and the bids CMS contemplates using are no longer realistic or relevant. Furthermore, any policy that could restrict the availability of home respiratory therapies should be reconsidered in a marketplace disrupted by the virus spread.

**CMS Policy Responses to Date**

With temporary regulatory waivers and rule changes, CMS is attempting to equip the healthcare system with the “flexibility to respond to the 2019 Novel Coronavirus (COVID-19) pandemic.” For example, CMS said they were temporarily not enforcing the clinical conditions for coverage for respiratory DME items and waiving signature and proof of delivery requirements for DME. Another example is when DMEPOS is lost, destroyed, irreparably damaged, or otherwise rendered unusable, DME Medicare Administrative Contractors now have the flexibility to waive replacement requirements under Medicare such that the face-to-face requirement, a new physician’s order, and new medical necessity documentation are not required.1 CMS is also waiving prior authorization and accreditation requirements for DME suppliers.

While CMS has openly recognized that the Industry is in turmoil due to COVID-19, CMS has not postponed the implementation of Competitive Bidding (CB) for 2021 based on pre-COVID-19 market signals. This policy of pushing ahead with CB appears to be counterproductive to patient care given the current economic and care delivery landscape, and the fact that the world has been irretrievably changed for the foreseeable future.

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Executive Summary

Summary of Key Findings

Quantitative findings are primarily in the areas of supply chain disruptions leading to delays and order cancellations, as well as increased costs from surcharges and price changes from manufacturers and distributors. In both areas, respondents were asked to quantify the length of time which the product was delayed, and the percentage increase in costs for each product category in which companies reported increases. Products include critical supplies for directly treating COVID-19 (such as respiratory assist devices and supplies, hospital beds, and PPE) and other product categories not directly relevant to treating COVID-19 patients, such as wheelchairs.

Findings on Delays and Supply Chain Interruptions

Across the sample of approximately 500 companies, respondents reported they were experiencing supply chain interruptions in each of fifteen product categories. Responses ranged from 96.9 percent of companies experiencing delays in receiving Personal Protective Equipment (PPE) to 21.2 percent experiencing delays in receiving Negative Pressure Wound Therapy Pumps/Supplies. See Exhibit 1.

Exhibit 1

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“Not able to acquire medical equipment and supplies (Oxygen and Oxygen related supplies) Ventilators, etc. on a timely manner therefore losing the sales.”

-Survey Respondent
Very concerning is the finding that 97 percent reported experiencing delays for PPE, 81 percent reported delays in receiving Oxygen, and 81 percent reported delays in receiving Ventilators. These product categories are the ones needed for treating COVID-19 patients, and these product categories had the widest reports of market failure. However, three other product categories are also important to treating COVID-19 patients, such as Hospital Beds, CPAPs/RADs, and Nebulizers. Nearly 60 percent of companies reported disruptions in receiving Hospital Beds. Approximately half of companies reported disruptions in receiving CPAP/RADs and Nebulizers, very likely due to the rapidly increasing number of COVID-19 patients.

Other product categories, such as Wheelchairs (all types), Support Surfaces, Enteral Nutrition, Walkers, Patient Lifts, Negative Pressure Wound Therapy, and Other Medical Supplies which are not used to directly treat individuals with COVID-19 infection also were subject to delays and cancellations. This disruption ranged from 49 percent of companies for Other Medical Supplies to 21 percent of companies for Negative Pressure Wound Therapy.

For the purposes of this report, we grouped these latter product categories together as they seem to be “collateral damage” from the extreme disruptions associated with the six product categories directly used to treat COVID-19 patients. Exhibit 2 shows how the two product groups differed as to the effect of the supply chain disruptions, with 70 percent of companies reporting disruption in product categories needed to directly care for COVID-19 patients vs. 30 percent of companies reporting on disruption to collateral product categories.

**Exhibit 2**

<table>
<thead>
<tr>
<th>Percent of Respondents Answering Yes to Experiencing Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Direct</td>
</tr>
<tr>
<td>70%</td>
</tr>
<tr>
<td>30%</td>
</tr>
</tbody>
</table>

“In demand items now cost more than what Medicare reimburses, shipping is more expensive, and vendors unable to price negotiate.”

Survey Respondent
In terms of the length of the delays in receiving products, delays were greater for product categories needed for directly treating COVID-19 patients, with 67 percent of companies reporting delays of 31 to 60 days and 74 percent reporting delays of over 61 days, and with 72 percent reporting no known timeframe or ETA. For other product categories (considered to be collateral to those directly used for COVID-19 patients), delays were shorter, with 33 percent of companies reporting delays of up to 30 days in receiving products, 26 percent reported 31 to 60 days delay, and only 28 percent reported that they had no known timeframe. The delays are consistent with those reported by mail order businesses like Amazon and its customers. Exhibit 3 contains these findings.

Exhibit 3

Findings on Incurring Increased Costs
Companies responded that they were incurring increased costs in all product categories. Responses ranged from 86 percent experiencing increased costs for PPE to 19 percent experiencing increased costs for Complex Rehab Technology Wheelchairs/Accessories. As with supply chain interruptions, the greatest number of respondents reported increased costs for PPE (86 percent), Oxygen (67 percent), Ventilators (48 percent) and other equipment directly used to treat COVID-19 patients. See Exhibit 4.
Exhibit 4

Exhibit 5 contains the percent of companies reporting increased costs by whether the product categories are directly used for COVID-19 patients or collateral to COVID-19. Just over half of companies reported cost increases for direct product categories whereas 25 percent of companies reported such increases for collateral product categories.

Exhibit 5

Exhibit 6 contains the percentage increase that companies reported for the direct and collateral product categories. As can be seen in Exhibit 6, approximately 63 percent of products directly related to care of COVID-19 patients and approximately 38 percent of collateral products saw a price increase. There seems to be a positive correlation between
the size of the price increase seen by a product and it being necessary to treat COVID-19. Seventeen percent of products directly related to treating COVID-19 patients saw an increase of greater than 30 percent whereas 1 percent for those products not directly used for COVID-19 saw an increase of this magnitude.

Exhibit 6

Companies Incurring Additional Operating Expenses
Survey respondents were asked about business activities that they had initiated due to COVID-19 and whether these activities had produced increased operational costs for them. Activities included procuring IT technology for staff to work remotely, additional PPE for staff and for customers engaging with staff, time spent cleaning and sanitizing facilities and vehicles, among others.

The survey contained the following open-ended question for respondents to discuss the specifics of their revenue losses and/or increased costs to do business:

*In order to assess any additional operating expenses your business may have incurred as result of the COVID-19 pandemic, please indicate if any of the following business activities have resulted in increased costs (or lost business revenue) for your business?*

Exhibit 7 contains the quantitative responses concerning the types of activities companies were engaged in to protect their staff and/or accommodate staff working from home during the pandemic. These results indicate uniform cost pressure across a wide variety of products and activities, each of which adds significant operating costs.

Exhibit 8 contains a sample of the qualitative responses which provide additional details of the activities and precautions the companies report taking every day to protect their staff members. It is important to read the story in company staff’s own words.
Executive Summary

Exhibit 7: Business Activities Implemented to Protect or Accommodate Staff Needs

Exhibit 8: Narrative Responses

“About 75% reduction in revenue. Massive increase in costs of doing business from policy updates, patient communications, curbside pick-up program. Work from home programs, technology spending increases (zoom, telemed, etc.).”

“Increase time asking essential questions before delivery. Deciding on a daily basis how to accept referrals and carefully do set ups. Extensive cleaning before putting in vans and then cleaning vans and then cleaning equipment again to go back out. Multiple deliveries and pick-ups. Means multiple PPE, which is hard to come by. Using UV, ozone, alcohol to clean and sanitize.”

“We have split the workforce into two halves in order for us to keep working in the event we have a positive workforce case or exposure that will allow the other half to continue to work. We thought we were doing the right thing and applied for the Payroll Protection Program but since the money ran out, we are very scared we will not be able to continue our business in the next few months. Awful situation for us as we try to handle our current customers and new customers due to the COVID.”

“The delivery cost has increased by about 100%. Every delivery has to have the driver check in and disinfect as well as screen. It takes so much time to accomplish even a simple delivery or equipment check.”

“There is no way to put a $ on the amount of stress that is caused from owning a small HME in a rural area (that CMS classifies otherwise), being quarantined at home with family members with Coronavirus and still making sure oxygen/respiratory patients are properly taken care of. I would not attempt to walk into the office so my sister (co-owner) would Facetime me to ensure patients were given the correct supplies. She’s an accountant and knows nothing respiratory so it was challenging. Ex-employees stepped up and helped in several occasions. I feel the time spent for each patient has doubled because I’m now following up with each to evaluate and go over anything they didn’t understand remotely. I have no time to get charts finished to bill because I’m now back to working 14 hours a day to just handle the new setups and meeting patient needs.”
Detailed Study Findings

Quantitative findings in this chapter are organized into two categories: 1) the presence and magnitude of supply chain disruptions, and 2) increased product costs from surcharges and higher prices from manufacturers and distributors.

In this chapter of the report, we present the survey findings for each product category concerning supply chain interruptions and increased costs.

**Personal Protective Equipment (PPE)**

Nearly all companies reported supply chain interruptions (97 percent) in receiving PPE, with almost 35 percent experiencing a delay of up to 60 days and 46 percent reporting that they have no known timeframe or ETA for receiving their orders.

In terms of increased costs, 86 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on PPE. Of those, approximately 44 percent of companies reported experiencing increased costs of over 30 percent.

**Respiratory Equipment**

**OXYGEN**

Approximately 81 percent of companies reported supply chain interruptions in receiving Oxygen equipment, with 32 percent experiencing a 30-60- day delay in receiving product. Approximately 25 percent reported that they had no known timeframe or ETA for receiving their product.

In terms of increased costs, 67 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on oxygen equipment. Of those, approximately 56 percent of companies reported experiencing increased costs of up to 20 percent.
VENTILATORS
Approximately 81 percent of companies reported supply chain interruptions in receiving Ventilators, with 27 percent reporting up to 60 days delay and 53 percent reporting they had no known timeframe or ETA for receiving product.

In terms of increased costs, 48 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on ventilators. Of those reporting increases, approximately 34 percent of companies reported experiencing increased costs of up to 20 percent.

NEBULIZERS
Approximately 49 percent of companies reported supply chain interruptions in receiving Nebulizers, with 65 percent experiencing up to 60 days delay in receiving product.

In terms of increased costs, 32 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on Nebulizers. Of those reporting increases, approximately 37 percent of companies reported experiencing increased costs of up to 20 percent.

CPAPS/RADS
Approximately 53 percent of companies reported supply chain interruptions in receiving CPAPs/RADs. Of those reporting a delay, approximately 62 percent reported experiencing up to a 60 day delay in receiving product.

In terms of increased costs, 29 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on CPAPs/RADs. Of those, approximately 32 percent of companies reported experiencing increased costs of up to 20 percent.

Hospital Beds
Approximately 59 percent of companies reported supply chain interruptions in receiving hospital beds. Of those, approximately 64 percent reported experiencing up to 60 days delay in receiving product.

In terms of increased costs, nearly approximately 47 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on hospital beds. Of those, approximately 49 percent of companies reported experiencing increased costs of up to 20 percent.
Support Surfaces
Approximately 31 percent of companies reported supply chain interruptions in receiving support surfaces. Of those, 65 percent reported experiencing up to 60 days delay in receiving product.

In terms of increased costs, 31 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on support surfaces. Although 58 percent reported no change, approximately 35 percent of companies reported experiencing increased costs of up to 20 percent.

Enteral Nutrition
Approximately 27 percent of companies reported supply chain interruptions in receiving enteral nutrition, with 62 percent experiencing up to 60 days delay in receiving product.

In terms of increased costs, 22 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on enteral nutrition. Of those, approximately 29 percent of companies reported experiencing increased costs of up to 20 percent.

Negative Pressure Wound Therapy Pumps and Supplies
Approximately 21 percent of companies reported supply chain interruptions in receiving negative pressure wound therapy pumps and supplies. Of those reporting a delay, nearly 38 percent reported delays of up to 30 days, and 29 percent reported that they had no known timeframe or ETA for receiving product.

In terms of increased costs, 24 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on negative pressure wound therapy pumps and supplies. Of those, approximately 23 percent of companies reported experiencing increased costs of up to 10 percent.

Patient Lifts/Seat Lifts
Approximately 22 percent of companies reported supply chain interruptions in receiving patient lifts/seat lifts. Of those, 50 percent reported a 30-day delay in receiving product, and nearly 20 percent reported no known timeframe or ETA.

In terms of increased costs, 21 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on patient lifts/seat lifts.
Detailed Study Findings

Wheelchairs

MANUAL WHEELCHAIRS
Approximately 30 percent of companies reported supply chain interruptions in receiving manual wheelchairs. Of those, 74 percent experiencing up to 60 days delay in receiving product.

In terms of increased costs, 25 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on manual wheelchairs. Of those, approximately 31 percent of companies reported experiencing increased costs of up to 20 percent.

STANDARD POWER WHEELCHAIRS
Approximately 26 percent of companies reported supply chain interruptions in receiving standard power wheelchairs, with 49 percent experiencing a 30 day delay in receiving product.

In terms of increased costs, 22 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on manual wheelchairs. Of those, approximately 23 percent of companies reported experiencing increased costs of up to 10 percent.

COMPLEX REHAB TECHNOLOGY WHEELCHAIRS
Approximately 36 percent of companies reported supply chain interruptions in receiving complex rehab technology wheelchairs, with 64 percent experiencing up to a 60 day delay in receiving product.

In terms of increased costs, 19 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on complex rehab technology wheelchairs. Of those, approximately 22 percent of companies reported experiencing increased costs of up to 20 percent.

Walkers
Approximately 24 percent of companies reported supply chain interruptions in receiving walkers, with approximately 54 percent experiencing a 30 day delay in receiving product.

In terms of increased costs, 21 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on walkers. Of those, approximately 28 percent of companies reported experiencing increased costs of up to 20 percent.

Medical Supplies
Approximately 49 percent of companies reported supply chain interruptions in receiving medical supplies, with 66 percent experiencing up to a 60 day delay in receiving product.
In terms of increased costs, 35 percent of companies reported that manufacturers and distributors had increased costs or levied surcharges on medical supplies. Of those, approximately 34 percent of companies reported experiencing increased costs of up to 20 percent.

**Conclusion**

In conclusion, we find it to be somewhat anomalous that CMS is making many concessions to accommodate COVID-19 market disruptions, but it contemplates implementing payments based on outdated market data embedded in CB based pricing. CB bids are no longer relevant because: 1) costs and product availability have changed, 2) cost of doing business has changed, 3) historic demand for which they base capacity on is not relevant.

Recent events have demonstrated the extreme fragility of the healthcare delivery system. Fundamentally, the CB Program is designed to limit the number of contracted suppliers available to meet projected demand. Capacity was based on historic demand, which does not account for the changes in health care demand due to the pandemic.

There has been a 36% reduction in suppliers since CB began. Currently, CB is on pause nationwide, allowing any willing and eligible DME supplier to provide equipment, services, and supplies. Restricting access to the number of companies available to meet the country’s needs during a public health emergency could have catastrophic consequences. Furthermore, there are still significant unknowns about the longer-term ongoing medical needs of those affected by the virus as preliminary research points to issues with the lungs, heart, and brain. Maximizing capacity is critical to ensure that we have the infrastructure needed to support these individuals.