

Infection Prevention/Supply Chain Strategies for the 2020-2021 Respiratory Season



The last place an individual should acquire an illness is in a healthcare

facility, but in reality, healthcare acquired infections (HAI) pose a significant threat to patients. Invasive interventions, such as central line or catheter insertion, increase the risk for some of the most costly and common HAIs (e.g. CLABSI, CAUTI, SSI), while a change in seasons brings on greater risk for respiratory illnesses (e.g. flu, pneumonia, bronchitis, RSV).

This respiratory season, the opportunity for infectious disease spread has been heightened by the COVID-19 pandemic. Healthcare facilities are struggling to battle this new threat to patient and staff safety, on top of their typical HAI burden. As evidenced by the personal protective equipment (PPE) shortages, supplies are a critical component in helping to prevent COVID-19 transmission; therefore, collaboration between infection preventionists (IP) and supply chain professionals is essential.

The first article of this series described how supply chain staff can strengthen infection preventionists' efforts to help protect patients and clinicians from dangerous HAIs by supporting compliance with infection prevention protocols and matching supply ordering to disease trajectories. This article explores additional best practices in supply chain/infection prevention collaboration and strategies to help manage supply shortages and leverage standardization, and considerations when evaluating the many new infection prevention products that have come to market during the pandemic.

Care continuum supply integration

Patients can acquire a HAI anywhere throughout the healthcare continuum – from hospitals to home care and everywhere in between (e.g. physician offices, long-term care facilities, clinics).



BUILDING YOUR ROADMAP CHAPTER 3: INFECTION PREVENTION

That's why it's important for supply chain to work with infection preventionists to help develop sanitation and disinfecting protocol for all care sites.

As Phenelle Segal, RN, CIC, FAPIC, President, Infection Control Consulting Services, explains, supply chain professionals with expertise and experience in the acute care space can extend their strategies outside of the hospital, helping infection preventionists in the selection of products that support protocols in the non-acute.

"Different sites have different needs, and they also have different ways in which to obtain supplies," said Segal. "Acute care hospitals have been extremely fortunate in that they have a large pool of suppliers. Non-acute facilities are typically more limited in their supplier connections. Supply chain has an opportunity to bridge supply sources across acute and nonacute care sites, while still meeting the unique infection control needs of the individual facility."

Supply shortages caused by the COVID-19 pandemic have driven all categories of healthcare facilities to seek out alternative product solutions for infection prevention, such as PPE and disinfectants. Patti Baicy, RN, CNOR(E), Director of Clinical, McKesson Medical-Surgical Extended Care, notes how this is another opportunity for supply chain teams and infection preventionists to put collaboration into action.

"Because of shortages in the industry, they have to be flexible and creative and use products they may not have been used before," said Baicy. "For example, disinfectant wipes are scarce because of global demand (consumer and healthcare) for these products, including the raw materials used to manufacture them. Healthcare facilities may need to consider an alternative product that it listed on EPA List N, such as using a disinfectant spray with a reusable washcloth or disposable task wipe."

"It's important to keep an open mind when it comes to new products that have come to market, particularly if they are trending toward helping with COVID, and look at as many options as we possibly can."

- Phenelle Segal, RN, CIC, FAPIC, President, Infection Control Consulting Services

While the need for supply alternatives is a reality this respiratory season, Baicy cautions facilities that they should still align product choices with infection prevention protocols. She notes how they can use funds provided under the CARES Act to purchase PPE and other necessary supplies.

"Make sure your workers are using the most appropriate product for the task assigned," said Baicy. "Looking at gloves, we have to make sure food service is using food service gloves, housekeeping is using housekeeping gloves and we are saving medical exam gloves for clinical use."

Supply standardization

Another way that supply chain and infection preventionists can boost infection prevention efforts this season is through product standardization across the non-acute continuum, including surface wipes, disinfectants and cleaning agents, hand soap and sanitizers, and PPE. This can help support clinical parity and may lower infection rates and potential readmittance for HAIs.

"Standardization is one of the most important aspects of supplies for infection prevention, including both acute and non-acute facilities," said Segal. "During site visits we will often find five or six different types of products, particularly cleaning agents. The problem is that if you don't standardize you have to follow the manufacturer's instructions for use (IFU) for each individual product and it becomes confusing."

"Product standardization is particularly important during the COVID-19 pandemic because of the education and other steps that have to be taken in order to use these items correctly," Segal added. "N95 face masks have to be fit tested, so if you have five different brands of N95 you will have to fit test each brand on each employee who will wear it. With the supply shortages we have faced this year, standardization is more of an idealistic vision than a practical one. However, we are still doing our best to achieve it where we can."

Baicy points to gowns as another example of where supply

standardization can benefit facilities this respiratory season, stating;

"It goes back to having the correct protection level for healthcare workers according to the Association for the Advancement of Medical Instrumentation (AAMI) rating system. Perhaps in the past your facility stocked a basic isolation gown that was not AAMI rated, as well as AAMI level 1 and 2 gowns. In this scenario, there is risk for the workers not getting the level of protection they need. For a non-acute facility, it might make sense to standardize on a single gown that meets the AAMI rating your clinical staff members require in their roles."

New product introductions

The COVID-19 pandemic has brought with it a wide range of new products aimed at infection prevention. The choices can be overwhelming for acute and non-acute facilities alike. Working together, infection preventionists and supply chain professionals can evaluate the options to determine if they make sense for their organizations from a variety of perspectives (e.g. clinical, workflow, cost).

"It's important to keep an open mind when it comes to new products that have come to market, particularly if they are trending toward helping with COVID, and look at as many options as we possibly can," said Segal. "In infection prevention, we want to see the science including studies and data behind the claims. We look at the actual item, the detailed information provided and its intended purpose before making a decision."

Healthcare facilities frequently ask Segal to evaluate new products; most recently those aimed at protecting against COVID-19. In one instance, a speech pathology client asked her to assess a face mask where the area around the mouth is clear, believing this could help with patient speech evaluation and therapy.

"We looked at the mask and found it didn't provide enough protection for someone like a speech pathologist who is working right up against someone's face," said Segal. "As IPs it's important to adjust our way of thinking based on each potential use case. This includes what we need to know and what we need to investigate before providing the facilities or healthcare companies with guidance for considering product trials or purchase.

For supply chain professionals and infection preventionists, the range of products available to help prevent the spread of COVID-19 and other respiratory illnesses includes not only new products, but also existing ones with new applications. One is Theraworx Protect Foam, an advanced hygiene solution that can be safely applied around the eyes, nose and mouth, complying with the Centers for Disease Control and Prevention (CDC) guidelines on facial cleansing.

A study conducted by researchers at the Johns Hopkins University School of Medicine found SARS-CoV-2, the virus that causes COVID-19, can enter the body through the eyes (ocular surface cells including conjunctiva), and that the eyes can also serve as a reservoir for person-to-person transmission of this virus. The research highlights the "importance of safety practices including face masks and ocular contact precautions in preventing the spread of COVID-19 disease."¹

"It's very important for supply chain and IP to stay up to date on what has hit the market," said Baicy. "But they should also be very diligent about vetting those products and making sure they have the right claims and testing."

Conclusion

Infection control is top of mind for healthcare leaders this season as they attempt to protect patients and staff members against COVID-19, on top of typical seasonal respiratory illnesses and other HAIs. Because patients with COVID-19 and other infectious respiratory ailments present for diagnosis and treatment not only at hospitals, but anywhere along the continuum of care, a healthcare organization's infection prevention strategy should encompass all of these care sites. As with the acute care environment, collaboration between supply chain professionals and infection preventionists is critical to arming clinicians with the supplies they need to provide effective and safe care, anywhere.

Visit <u>mms.mckesson.com/content/</u> <u>clinical-resources/infection-prevention</u> to learn more ways in how to help control the spread of respiratory disease.

¹ Zhou L, Xu Z, Castiglione GM, Soiberman US, Eberhart CG, Duh EJ. ACE2 and TMPRSS2 are expressed on the human ocular surface, suggesting susceptibility to SARS-CoV-2 infection. Ocul Surf. 2020 Jun 13;18(4):537-544. doi: 10.1016/j.jtos.2020.06.007. Epub ahead of print. PMID: 32544566; PMCID: PMC7293510.