Supply Chain's Role in Infection Prevention This Respiratory Season

As clinicians contend with COVID-19 on top of seasonal respiratory illnesses, and continue their fight against other HAIs, supply chain and infection prevention (IP) should collaborate to provide supplies aligned with organizational IP protocols, and state/federal government regulations.

Healthcare organizations are currently facing an unprecedented respiratory season as cases of COVID-19 converge with typical seasonal illnesses (flu, pneumonia, bronchitis, RSV). At the same time, they should continue to manage non-respiratory, healthcare acquired infections (HAI) as approximately 1 in 31 patients every day acquire at least one infection associated with hospital care (e.g. CLABSI, CAUTI, SSI).[1]

Because HAIs can occur in any care setting, a healthcare organization's infection prevention strategy should reach beyond the acute care hospital and into urgent care, physician offices, long-term care centers and all the way through to home care. Clinicians in any of these settings bear the burden of preventing HAIs on top of treating patients for any number of other conditions. The COVID-19 pandemic has added significant pressure to this already strained care delivery system.

How supply chain can help

Collaboration between infection preventionists and supply chain professionals has always been a critical component of preventing HAIs, with both teams working together to acquire the supplies their healthcare facilities need to protect patients and clinicians from dangerous pathogens. In the coming months, it will be more important than ever for these two teams to work together on infection prevention strategies throughout the continuum of care.

Support infection prevention protocols

The development and implementation of infection prevention protocols is one way to prevent the spread of disease. Supply chain professionals can position themselves as an extension to clinical quality and control teams by helping with value analysis and standardization. The support of supply chain into non-acute settings is critical this season as frontline care sites will be key in helping to prevent, diagnose and treat respiratory diseases, including COVID-19.

Supply chain professionals who understand their healthcare

organization's infection prevention protocols across facilities can better help them procure appropriate supplies, explains Patti Baicy, RN, CNOR(E), Director of Clinical, McKesson Medical-Surgical Extended Care.

"This includes the whole continuum of care – starting from acute care all the way through to home health and hospice and anything in between. Every care setting has unique IP requirements that should be considered," said Baicy. "Supply chain can help infection preventionists make sure they have the appropriate products in their facilities to meet protocols based on CDC and FDA guidance."

"Because of shortages in the industry, this means they will have to be flexible and creative," continues Baicy. "For example, there is such a shortage of disinfectant wipes due to global demand (consumer and healthcare) that clinicians may have to use alternative supplies that still provide the appropriate levels of disinfection, such as a disinfectant spray with a reusable washcloth or disposable task wipe. Working together, supply chain and infection prevention can identify those products that comply with the organization's protocols."

IP Protocol Best Practices

- Document your processes and place them in a centralized area, update as necessary depending on disease conditions
- Publish your infection prevention protocols in areas where patients will see them, such as your website and patient portals, to help patients feel confident in seeking medical services

As Phenelle Segal, RN, CIC, FAPIC, President, Infection Control Consulting Services, explains, the supply pressures of the COVID-19 pandemic have forced healthcare facilities to engage in many practices that go against standard infection prevention protocols, such as reusing N95 respirator masks and reprocessing single use items. While these actions have been necessary, Segal urges facilities not to lose sight of standard practices to prevent HAIs beyond COVID-19.

"Because we have been so turned upside down by COVID-19, we risk losing sight of infection prevention that goes beyond just protecting ourselves and patients from respiratory droplets," said Segal. "We have to make sure that we maintain standard practices aligned with our IP protocols and keep HAIs in the forefront of our minds as to how to prevent them. We still have to make sure we are performing sterile techniques when operating, reprocessing instruments and inserting invasive devices, such as central lines, foley catheters and IVs. Communication with clinical staff is critical to remind them that patients are still coming into hospitals and outpatient centers for treatment that are not COVID related."

Match supply ordering to disease trajectories

There are so many unknowns going into the 2020-2021 respiratory season: How many flu cases will emerge? Will the second surge in COVID-19 cases be as severe as the first or even worse? How will clinicians be able to differentiate these illnesses from colds, pneumonia and respiratory syncytial virus (RSV)?

In this complex and ever-changing environment, supply chain leaders should lean on county, state and government resources, such as local health departments and the U.S. Centers for Disease Control and Prevention (CDC), for information. These agencies track where infectious diseases are emerging and can help supply chain understand what is spreading in their specific areas. The more proactive supply chain professionals can be with understanding disease trends in their organization's care areas, the more successful they will be in collaborating with infection preventionists to provide clinicians with the supplies they need for prevention, diagnostic testing and treatment.

"Health systems can't be complacent; they have to keep evaluating the trajectory of diseases, including the pandemic, monitor their supplies and monitor the companies from which they are obtaining their supplies," said Segal. "When consulting with healthcare organizations, I find the acute care facilities are in a better position with regards to matching supplies with clinicians' needs. The non-acute settings have a tougher time, whether it is an outpatient surgical center, doctor's office or nursing home."

The government requirements for emergency supply reserves are changing daily; therefore, supply chain is also challenged with keeping up on these evolving regulations, particularly for those healthcare organizations that operate in multiple states. For example, the Governor of California signed a bill requiring all hospitals in the state to stockpile

45 days' worth of personal protective equipment (PPE) as a precaution against COVID-19 and other future disease outbreaks.[2] In the state of Maryland, all nursing homes are required to maintain a 30-day private stockpile of PPE by November 30, 2020 and must increase that amount to a 60-day private stockpile by January 31, 2021.[3]

"In addition, the Department of Health and Human Services (HHS) has come out with the Prep Act, which means the federal government can override state testing for COVID-19," said Baicy. "There is a lot to keep up with on the federal and state levels from a supply chain perspective. It's a daily task to keep up on the guidance. This is especially difficult for multi-state organizations because they have to understand the regulations in all of the states in which they operate."

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By keeping informed of the changes in laws affecting healthcare, supply chain can ensure their facilities are appropriately stocked to meet new regulatory requirements. While supply chain helps ensure that clinicians have PPE and other supplies on hand to safely and effectively manage respiratory patients while preventing other HAIs, Segal cautions against Stockpiling, especially supplies that are not authorized for use in the USA and subsequently possibly ineffective.

"It's a very fine line," said Segal. "I'm finding a lot of the facilities I consult with are stockpiling supplies and it turns out the supplies are not authorized to be used as they intend to use them. Therefore, the relationship between any type of healthcare provider and its suppliers is more important now than ever.

One option available to help with accurate ordering is the McKesson PPE Estimator. Its calculations are based on publicly available guidance from CDC and other clinical authorities, and on practical customer application and feedback. The Estimator is available via the McKesson Business Analytics (MBA) tool. Contact McKesson at mckesson.com/takecontrol and request a demonstration of the PPE estimator.

Conclusion

Infection preventionists play a critical role in supply chain decisions, providing knowledge on clinical needs, as well as evaluating product effectiveness and use. Supply chain, in turn, has helped guide these supply purchases by offering insights into the marketplace, including product and pricing information, availability and new options introduced by manufacturers. The collaboration between these two teams has been invaluable as healthcare organizations have navigated supply shortages caused by the COVID-19 pandemic.

Moving forward, it is even more critical for supply chain and infection preventionists to work closely together to assess the needs of clinicians as they cope with COVID-19 on top of seasonal respiratory illnesses, while s working to minimize the risk of other HAIs.

In the next article, we will present best practices for infection prevention/supply chain collaboration when integrating infection prevention products between acute and non-acute sites, strategies to help manage supply shortages and where standardization can help, and considerations when evaluating the many new infection prevention products that have come to market during the pandemic.

Visit https://mms.mckesson.com/content/coronavirus-update/ip-best-practices to learn more ways to help control the spread of respiratory disease.

[1] HAI and Antibiotic Use Prevalence Survey, https://www.cdc.gov/hai/eip/antibiotic-use.html).
[2] Gov. Newsom Signs Bill Requiring Hospitals To Stockpile 45 Days' Worth of PPE, California Globe, September 30, 2020, https://californiaglobe.com/section-2/gov-newsom-signs-bill-requiring-hospitals-to-stockpile-45-days-worth-of-ppe/
[3] AMENDED DIRECTIVE AND ORDER REGARDING NURSING HOME MATTERS Pursuant to Executive Orders Nos. 20-06-10-01, 20-04-29-01, and Various Health Care Matters of March 16, 2020, Maryland Department of Health, https://health.maryland.gov/bonha/Documents/2020.10.27.01%20-%20MDH%20Order%20-%20Amended%20Nursing%20Home%20Matters%20Order.pdf