



# SUPPLY & DEMAND

**Out of a pandemic, PPE best practices emerge**

PRIOR TO COVID-19, PERSONAL PROTECTIVE EQUIPMENT (PPE) WAS LIKELY TAKEN FOR GRANTED IN MANY HOSPITALS AND HEALTH SYSTEMS. But when the pandemic hit in March 2020, hospitals went from needing PPE for a small targeted population in specific circumstances, to needing some form of PPE for virtually everyone in most care scenarios. Fears that hospitals across the United States would run out of PPE became a reality for some.

“Before COVID-19, if a patient was on isolation or precautions, you would open the drawer to the isolation cart and it was all there for you—the mask, the hat, the gown, the gloves,” says **Angie Mitchell**, RN, AVP, Clinical Services at HealthTrust. “This has been a pretty significant wakeup call.”



The concerns around PPE supply and demand during the pandemic have led clinicians and supply chain professionals to reflect on what was being used and for what purpose—for example, in some cases staff with low risk of exposure and no patient contact would wear N95 masks. As shortages loomed, those practices and others were reevaluated.

“At HealthTrust, we have used evidence-based care to show that not everyone needs an N95 mask,” says **Sarah Michel**, MBA, BSN, RN, NE-BC, Director of Research & Clinical Engagement at HealthTrust. “Appropriate PPE use at the appropriate time has helped conserve PPE.”



## SOURCING & CONSERVING

Mitchell, Michel and their colleagues at HealthTrust continue to evaluate alternative potential sources of masks, gowns, shields, gloves and other PPE products, monitoring the Food and Drug Administration (FDA) for updates. For instance, to help hospitals through the initial crisis period, the FDA issued emergency use authorizations (EUAs) for some masks and other PPE products not normally used in healthcare settings.

The Centers for Disease Control and Prevention’s (CDC) PPE Burn Rate Calculator has been an important tool in predicting how quickly hospitals will go through PPE compared to baseline use. “The calculator helps providers have a better handle on what they need during a surge, so they know when they are reaching crisis mode,” says Michel. The PPE Burn Rate Calculator can be found on HealthTrust’s clinical resources site at [education.healthtrustpg.com/PPECalculator](https://education.healthtrustpg.com/PPECalculator)

Before COVID-19, hospital supplies would sit at-the-ready on a shelf. When something got down to par level, it would

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– Angie Mitchell, RN

be reordered. But everything changed during the pandemic. “Once COVID-19 hit, all of a sudden, par levels weren’t valid anymore,” says Mitchell. “Hospitals started to look at how to get back on top of this and conserve PPE.”

One conservation strategy has been to decontaminate and safely extend the life of products that are otherwise intended for one-time use. To that end, the FDA has granted EUAs for vaporized hydrogen peroxide and steam sterilization decontamination systems.

## CENTRALIZED DISTRIBUTION

“If PPE is all over the facility, it’s hard to calculate the actual amount available,” says Michel. That’s why many hospitals have centralized all of their PPE to one location for distribution and safe keeping on supply versus demand, helping to maintain accurate supply levels.

Many facilities have adjusted how PPE is distributed, with one staff member serving in the role of gatekeeper—handing out PPE to hospital employees and keeping the rest secured for more controlled use. HealthTrust outlined this type of PPE management for members as part of our PPE toolkit available at [education.healthtrustpg.com/PPEToolkit](https://education.healthtrustpg.com/PPEToolkit)

## LOOKING FORWARD

Now more than ever, hospitals have awakened to the need to remain diligent about having their supply pipelines carefully managed. Mitchell and Michel indicate that product shortages are still a valid concern, as are product validity and integrity, especially in light of possible future surges of COVID-19. Indeed, early in the pandemic, questionable brokers and sellers were frequently delivering underperforming products to hospitals, if they provided anything at all. “We rely on our manufacturers for a continuous supply of safe and effective products, so if something happens to upset supply and demand, there could be challenges,” says Mitchell. “That said, we are cautiously optimistic about supply availability.” **HT**