



# Infection Control in the COVID-19 Era

## Strategies for Reducing Infection Risk During and After the Crisis



**Cathy Campbell, CHESP, CMIP**

National Director of Service Delivery  
ABM Industries



**Sean Gallimore**

Senior Vice President and  
General Manager  
PDI Healthcare



**Marcus Schabacker, MD, PhD**

President and Chief Executive Officer  
ECRI

Infection control practices continue to be scrutinized as our healthcare industry faces an unforeseen public health crisis. The COVID-19 pandemic is forcing healthcare organizations to take quick action to protect patients and staff from potential exposure within their facilities. It's also prompting leaders to consider how they can bolster infection control processes and train their staff to better prepare for the future.

Even once the coronavirus has been contained, serious infection prevention challenges will remain. Healthcare-associated infections (HAIs) are a serious threat to health systems and their patients, each year impacting two million patients and costing U.S. hospitals \$28 billion to \$45 billion. As the pandemic subsides, cash-strained providers will be paying even closer attention to preventable costs like HAIs.

In a discussion with Modern Healthcare Custom Media on this critical topic, three industry experts offered insights into how their organizations are responding to COVID-19 and shared best practices for infection prevention and control.

**Cathy Campbell** is national director of service delivery for ABM's healthcare division. She has contributed to leadership development, product innovations, sustainability efforts and technical training for all lines of support services within healthcare. She is on the COVID Response Team providing leadership across ABM's business units.

**Sean Gallimore** is senior vice president and general manager of PDI Healthcare. He is a disciplined leader with a strong skill set in strategic marketing and a deep commercial background in healthcare and medical devices. He leads PDI's healthcare division including Tru-D SmartUVC.

**Dr. Marcus Schabacker** is president and chief executive officer of ECRI, an independent, nonprofit organization improving the safety, quality, and cost-effectiveness of care across all healthcare settings worldwide. He is a board-certified anesthesiologist and intensive care specialist with 35 years of healthcare experience.

### How have advances in technology changed our approach to infection control?

**CC:** We introduce our clients to a range of innovative technologies that range from disinfection interventions such as UVC mobile devices and antimicrobial surface coatings, to technologies that support the monitoring of cleaning such as Adenosine Triphosphate Bioluminescence (ATP). ABM builds a program around the daily cleaning of spaces, so it's important that we are able to build on our base program with technology that has proven efficacy.

**SG:** Technology allows for more precise care and better monitoring of practices, while improving efficiencies and ultimately saving costs in the long term. Environmental cleaning can be enhanced through the use of "no touch" technologies, like UVC disinfection, for total room

## Infection Control in the COVID-19 Era



*"During this time, nursing and environmental services must work together to protect both patients and staff."*

**Cathy Campbell, CHESP, CMIP**



decontamination. Some smart UVC devices track usage and provide real-time data reports, allowing for hospitals to improve utilization and identify gaps in protocols.

**MS:** Infection control efforts have benefited from technology advances, decreasing required manual tasks, and reducing staff and patient cross-infection. Automation in medical device and room decontamination help ensure more consistent results. Disposable medical devices, effective PPE, and smart hand cleaning systems protect both patients and healthcare staff. UV and hydrogen

peroxide decontamination systems are extending dwindling N95 inventories.

### What best practices can you share for training both new and existing staff on infection prevention?

**CC:** The training we offer to frontline environmental service staff becomes the educational platform our providers rely on for a high level of assurance and setting a threshold of expectation around quality. Best practices are only "best" when they are executed by staff who have a clear understanding of the importance of each process and how the execution of standard cleaning steps will impact the safety of patients, staff and visitors.

**SG:** Follow CDC and local official guidance for IP and good clinical practices. Leverage technology and virtual approaches to appropriately enhance learning. Hands-on training is the best way to ensure that providers have the knowledge and the ability to apply that knowledge appropriately. Initial training upon hire is important, but the ongoing reinforcement of IP policies and practices is even more critical for sustained success.

**MS:** A best practice for training providers on infection prevention is to characterize it as a team sport with participation from everyone and guidance by experts who rely on evidence-based information. Organizations should share outcome data both at the individual and the group level in a transparent way, emphasizing learning rather than a focus on violations. Repeated training or spot-checks might also enhance understanding and compliance.

### How can providers best monitor staff compliance with best practices for infection prevention?

**CC:** Staff must be held accountable for concepts learned during training, and expectations should be set between staff and supervisors on what high-quality performance looks like. This provides an avenue for an increase in visual quality and a confidence that surfaces are appropriately cleaned, ultimately setting a foundation for compliance to trained tasks. Proof of compliance to training concepts is tracked by quality audits.

**SG:** A multifaceted approach, including direct observations, patient involvement and integration of technology, can help ensure compliance to IP best practices. Observations give the opportunity to ensure appropriate technique and provide real-time feedback. Adding technology gives quantifiable data for tracking compliance variances over time, but it's important to understand limitations of technology, such as propensity for false negatives/positives.

What makes a moment like this possible?

A TOUCHING MOMENT

- SAFE & EFFECTIVE CLEANING
- HEPA-FILTERED HVAC SYSTEM
- WELL-MAINTAINED EQUIPMENT
- ENERGY-EFFICIENT LIGHTING
- SECURE EQUIPMENT NETWORK
- HEALTHY FOOD
- CARING PATIENT COMPANIONS

866.624.1520  
ABM.com/Healthcare

ABM'S PASSION TO MAKE A DIFFERENCE

**ABM**  
Building Value

## Infection Control in the COVID-19 Era



*"Providers should examine their work processes to streamline care without sacrificing quality."*

**Sean Gallimore**



**MS:** Monitoring staff compliance with evidence-based infection control protocols requires accurate collection of process and outcome metrics, which are regularly presented to providers and focus on performance improvement opportunities. In an organization with a strong safety culture, regular feedback is reinforced by staff who are encouraged to monitor each other, keeping colleagues safe by pointing out violations in a collegial manner.

**The recent public health crisis has highlighted areas for improvement within infection control processes at healthcare facilities across the country. Where do you see areas of improvement and how do you envision them being resolved?**

**CC:** As outpatient services have moved from hospitals to medical office buildings, the role of the infection preventionist has broadened, resulting in a thinning of competent staff responsible for education, implementation, surveillance and documentation. The expertise and level of support required to increase awareness of best practices has not kept up with the increase in non-acute care spaces. Health systems should invest in people and processes in this area.

**SG:** COVID-19 has emphasized infection control (IC) practices such as the role the environment plays in the transmission of infection. Supply chain management of key supplies like PPE, disinfection products and ventilators require a very different approach to the normal management objectives which are heavily focused on fiscal optimization. Some non-acute facilities are playing catch-up because they may not have the means to apply resources or an IC professional.

**MS:** Historical planning, especially in settings like long-term care, has focused on local and regional events, not global pandemics. While we've had global pandemics in recent years such as the 2009 H1n1pdm09 influenza, the SARS-CoV-2 has been much more severe and has highlighted these vulnerabilities. We need to heed the lessons of this pandemic to ensure that planning for future pandemics can better preserve lives and ensure staff safety.

## How should providers adapt to supply shortages that are arising during the COVID-19 pandemic?

**CC:** Collaborative agreements should be made between the environmental service workers and nursing staff in order to conserve PPE. Because we must reduce the number of individuals entering a patient room, nursing staff should clean during the patient stay, while environmental service workers will enter the space only after the patient is discharged. These two workforces must come together to protect both patients and staff.

**SG:** First, all providers should examine their work processes to streamline care without sacrificing quality and also ensure PPE and pandemic-related supplies are available and used appropriately. Next, this pandemic has emphasized the importance of collaboration between providers and facility supply chain partners to identify needs in real time, and with distributors and manufacturers to allocate product appropriately, when and where it is needed.

## Protect patients and staff throughout the whole environment of care.

- Waiting rooms
- Exam rooms
- Patient rooms
- Operating rooms



Powered By  
**MICROBAN**



©PDI 2020

PATIENT CARE    INTERVENTIONAL CARE

**ENVIRONMENT OF CARE**



## Infection Control in the COVID-19 Era



*"Chasing the latest trend can be a costly mistake. Effective infection prevention programs need evidence-based practices."*

**Marcus Schabacker, MD, PhD**



**MS:** Depleted inventories and national stockpiles rapidly forced providers to transition from traditional to non-traditional suppliers of PPE. As a result, providers must assess non-traditional suppliers that have entered the PPE market as well as unknown international suppliers. Providers should work closely with their partners, independent 3rd parties, GPOs, and supply chain associations, to help validate each supplier before procurement.

**How can providers ensure environmental services staff are kept up to date on the latest best practices?**



Improving the safety, quality, and cost-effectiveness of care across all settings

- | Patient Safety
- | Evidence-based Medicine
- | Technology Decision Support



The Most Trusted Voice in Healthcare

[in](#) [t](#) [f](#) [ecri.org](#)

**CC:** Our COVID-19 Operational Response Team operates from a familiar and proven framework of communicating with our field operations, funneling important resources from our organization and federal authorities back to those operational leaders so that best practices can be implemented immediately. Together with on-site infection prevention teams, we share our knowledge, collaborate and agree on the approach to daily cleaning for today and in the future.

**SG:** Environmental service professionals are important personnel on the frontlines of preventing infections. This team should feel valued and be empowered to be a patient's infection prevention advocate through ongoing training and education. In addition, providers should ensure ongoing compliance checks and observations are conducted, as well as regular acknowledgement of the team's efforts.

**MS:** Daily—or more frequent—organizational huddles that include representatives from all departments, who in turn lead departmental updates, can keep everyone informed about rapidly changing information. Rapid, concise distribution of information should be designed to include staff from all shifts, including strategies like message boards, handouts, emails, and the organization's intranet

**Health systems are under pressure to keep costs low. How can leaders ensure their infection control strategies are cost-effective?**

**CC:** We believe hospital administrators expect us to conduct the research required to support cost effective program choices that protect facilities and keep patients and occupants healthy and safe. Science should back claims of efficacy, safety and performance. The return on investment is realized by a reduction in infection rates, cost avoidance due to unnecessary readmissions, productive staff, and an increase in employee and patient satisfaction

**SG:** In addition to complying with GPO contracts and reducing product waste, an often overlooked component is cost avoidance. Every infection prevented saves a facility money. Manufacturer partners often have access to best practices and sample data reports to help benchmark and track information. Collaborating with manufacturers to develop optimal infection prevention strategies and supply chain management are key opportunities to manage costs.

**MS:** Chasing the latest trend can be a costly mistake. Well-designed programs involve input from all key stakeholders in the health system. The literature suggests cost-effectiveness in preventing healthcare-associated infection happens when a system has developed and successfully used a repetitive combination of evidence-based practices such as hand hygiene, surface disinfection, environmental cleaning, and PPE.