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Long-Term Care IPs Are 'Heroes' of the COVID-19 Pandemic

Facilities have been expected to fight COVID infections without resources or training

By Sue Coons, MA, Medical Writer

Infection preventionists (IPs) are the heroes of the pandemic, dealing with a profound crisis without proper training and resources, said experts in infection prevention and epidemiology during a recent “5 Second Rule” podcast from the Association for Professionals in Infection Control and Epidemiology (APIC).

The podcast, “#10 Advanced in Years Should Not Be Advanced with Tears: Infection Prevention and Control in Long-Term Care,” took an in-depth look at long-term care facilities.¹

They have been hit “very, very hard” during the pandemic, said podcast host **Silvia Quevedo**, CCC-SLP, CAE, director of practice guidance for APIC. She cited a 2016 Nursing Economic\$ article that said the nursing home population is hovering somewhere around 1.5 million and is expected to grow to 5.3 million in 2030.

“Why are these numbers so important?” she asked. “A large percentage of our population lives in these long-term care/assisted living settings. They are for the most part elderly or individuals with a lot of medical conditions, and so they are prone, more than healthy folks, to get healthcare-associated infections.”

This reality has never been more apparent than during the COVID-19 pandemic. Long-term care homes and assisted living centers house only 0.62% of the U.S. population, but account for 8% of all COVID-19 cases, and about 41% of all deaths in the United States.^{2,3}

Defining the Situation

Quevedo asked podcast guest **Angela Vassallo**, MPH, MS, CIC, FAPIC, to define the terms they would be discussing, such as long-term care,

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nursing home, and assisted living. “It’s my understanding that this issue of infection control goes back a while with this setting,” she said.

This world involves a lot of acronyms, said Vassallo, the co-founder of COVID SMART, an infection prevention online education program for the general public. She also is a member of the associate faculty at West Coast University in Los Angeles, earned the APIC fellow designation, and is the current chair of the APIC communications committee. Long-term care (LTC) is the general umbrella for everything, Vassallo said. Long-term acute care (LTAC) is a hospital type of environment, but long-term.

“Then we have nursing homes, or what we refer to often in healthcare as SNFs, skilled nursing facilities,” she said. There are different types of SNFs, such as vSNFs, which have a higher level of care with specific training of staff to manage ventilators. Then there are distinct part (DP) skilled nursing facilities. “Those are nursing homes that are basically part of a hospital,” Vassallo said. “They are either a separate wing with a separate license or across the street, but they usually tend to be associated and close to a hospital.”

Then there is home health, assisted living, a myriad of other things that happen outside of the regular nursing home, hospital, acute care type of environment, she said. “When we think of long-term care, we are mostly thinking of nursing homes, where people live. The staff provides basic healthcare to them, but they are residents. It’s different from being a patient at a hospital. It’s their home.”

“Why is COVID-19 hitting this population so dramatically?” Quevedo asked. “What are some of the challenges within these settings

for infection prevention and control and/or the spread of any disease?”

“One of the guiding principles is that residents that are residing in these facilities are often elderly,” said **Evelyn Cook**, RN, CIC, associate director for the North Carolina Statewide Program for Infection Control and Epidemiology (SPICE). “They have comorbidities or other diseases. It is rare that you would find a resident with just one medical illness and/or problem.” Cook is the principal lecturer of all SPICE infection control courses and leads applied research projects in infection control and epidemiology.

“Just by the nature of growing older we have some factors that lend themselves to compromising our immune system or making us less resistant to infections,” Cook continued. “Simple things, like a decreased ability to cough well, the fact that our skin thins as we age.” LTC staff always have provided a level of basic medical care, but with COVID-19, they are being expected to provide a level of care they have never faced or been prepared to handle, she said. They deal with the availability of resources, staffing resources, even educational resources, as it relates to emergencies such as the pandemic.

A Look at Resources

Quevedo expanded on the topic of resources. In 2016, the Centers for Medicare and Medicaid Services (CMS) issued a rule requiring these types of facilities to have a designated IP. “Even back in 2016, this was recognizing the need for a more ‘robust’ infection prevention program, not because of COVID, which didn’t even exist back then, but because of other healthcare-associated infections that we talk

about on the ‘5 Second Rule.’” The CMS rule shows that there were concerns with these settings, she said. She asked Vassallo to share about how staffing in these facilities typically works and how that might contribute to the problems we are seeing today.

“Staffing is a key issue in nursing homes when it comes to the work of infection preventionists,” Vassallo said. “The final rule that CMS passed in 2016 was a good thing because it said that we need a designated infection preventionist.” What that really meant, however, was that someone took the title of IP, but maybe didn’t have enough resources and training.

IPs in nursing homes tend to have several other titles, such as quality or risk, she said. They might be employee health, and they also might care for patients. In an environment where staff is minimal and the person who does infection prevention is doing lots of other things, sometimes infection prevention becomes the lowest on the priority list. “[For example], I am the IP in the nursing home, and I am supposed to be monitoring hand hygiene. If I have coworkers who are sick and I’m employee health, now I have to work with them on whether they should be at work. How long can they be out? If someone calls in sick, I may also have to start caring for patients.”

This is why they have had to go back to the basics during COVID-19 for infection prevention in nursing homes, Vassallo said. “Basic things like hand hygiene, environmental cleaning and disinfection, how to use personal protective equipment, and how to follow transmission-based isolation precautions, even just Standard Precautions, all seem suddenly more complicated because the people who do the work do not have the time to focus on these basic

things. They are juggling lots of hats, and that has contributed to what is happening.”

To summarize, Quevedo said, even though the rule came about, the people serving as the IPs or in that role in these settings may not have always had the necessary training or capacity to even address the challenges.

“We have to recognize that these facilities are actually the residents’ homes,” Cook said. “They have had the opportunity to have their families visit as often as they liked. They bring their belongings from home. They establish their rooms as it would be our rooms in our home.”

Not only that, but the entire environment in these facilities used to focus on joint activities, joint dining, joint socializing, and therapy where there was joint socialization, she said. “Now, unfortunately, all of that has been put on pause. We have visitor restrictions; residents are requested to remain in their rooms. There are no more joint activities with friends they have made in the facility.”

Significant staff turnover is important to recognize, too, Cook said. “With a revolving door like that, it is difficult to maintain continuity and train staff because you are constantly re-educating and constantly orienting individuals. It has certainly been a challenge for them.”

Caught Unprepared

Quevedo asked about the challenges surrounding the use and disinfecting of personal protective equipment (PPE). Typically, before COVID, LTC facilities were using PPE for things such as multidrug-resistant organisms like methicillin-resistant *Staphylococcus aureus*, Cook said. “Even with that, it was a modified version of what we do if the

person is in the hospital. They had no system set up to really deal with airborne or respiratory pathogens.” Up until COVID-19, the biggest concern was tuberculosis (TB), and LTC facilities did not have to have a fit testing program (for an N95 respirator) or need to have one unless they were designated as a facility to care for TB patients.

In the COVID-19 environment, the other facilities now are being expected to do fit testing, Cook said. “You have to be trained in that process. It doesn’t just happen. You have to have the supplies available. And then you have to have the N95 masks.” Since this happened during the crisis, a lot of those resources are very difficult to get right now.

“It sounds like we had a perfect storm in these settings,” Quevedo said. “Then we have a pandemic that hits, and that’s why we see these crazy numbers among this population.” There are certified nursing assistants and other staff in nursing homes who may not be paid adequately and are forced to work in multiple facilities, she continued. “We know there is transmission that way. What can infection preventionists do? How can we fix this?”

A Silver Lining

“A lot of this seems dismal [during COVID-19], but there are some bright spots,” Vassallo said. “One is that we are seeing an increased collaboration across the continuum of care. For me, that means nursing home staff, hospital staff, surgery centers, clinics, and health department folks are talking to each other a lot more.

“In healthcare, we often work in silos, thinking about our building,” she said. “I work for this hospital. This is what I am doing.’ What I have seen is

this great sense of collaboration where people working in different healthcare environments in a community are communicating more. That's a positive for us in the long run."

Cook agreed. APIC is playing a primary role in encouraging that collaboration, both at the national and state levels, she said. "As professionals, it's our responsibility to foster that collaboration and involve not just long-term care but other settings [such as outpatient]. As [Vassallo] mentions, these are all of our patients/residents — people we are providing care for, regardless of what term we use to describe them."

Vassallo said she knows that most IPs who are active members of APIC work in hospitals or as consultants in different settings. She encouraged her colleagues to get to know IPs who work in the nursing homes near their facilities. "It's as simple as calling," she said. "This is what I did when I was in Santa Monica at Saint John's Health Center. I would look at the name of the [nursing home] and just call them. I would say, 'Hi, I'm Angela,' and introduce myself. I built some great relationships that way. I'm hoping we can see more of that."

"It would make a big difference in preventing events like this from happening again," Cook said.

Heroes of COVID-19

Quevedo closed the podcast by asking a final question: "What is bugging you about all of this?"

"I think what is bugging me the most is that long-term care facilities [and other facilities as well] are being expected to do things that they were never really expected to do before," Cook said. "Some of those things the facilities were never designed to accomplish. It's very difficult for them to maneuver through an outbreak such as this when they have never really been given the direction to do so."

"Long-term care facility staff are doing a phenomenal job," she continued. "They are doing creative things with their residents: drive-bys, birthday celebrations, making bunny masks at Easter. They are just doing so many fabulous things, and I think we have to do everything we can to support them."

"That is such a humane way to look at it," Vassallo said. "I have such respect for nursing home staff, in particular infection preventionists who work in nursing homes. This is not easy work. People go into this because they believe in it. I would like to see infection preventionists within hospitals and APIC really

support them, embrace them, and lift them up, because this time around, they are our heroes. They keep going to work every day, which I think is phenomenal. It's humbling. I would like us to make them the spotlight of the work that's happening in APIC this year." ■

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COVID-19 Nursing Home Cases Reflect Infection in Local Communities

Lower-income workers also are more susceptible to severe illness

By Sue Coons, MA, Medical Writer

Nursing homes with higher rates of complaints and deficiencies had more reported COVID-19 cases, according to a "snapshot" study of nursing homes that reported cases in late April 2020. The research,

published July 29, 2020, on JAMA Network Open, also found that COVID-19 rates were significantly higher in counties where facilities had cases, showing how community spread affects local nursing homes.¹

"Nursing homes are at the heart of this pandemic," explains lead author **Paula Chatterjee**, MD, MPH, assistant professor in the Division of General Internal Medicine at the University of Pennsylvania in

Philadelphia. “We wanted to evaluate whether there were differences in the types of nursing homes that were reporting COVID-19 cases early on in the pandemic compared to nursing homes that were not reporting cases.”

On April 19, 2020, the Centers for Medicare & Medicaid Services (CMS) posted a requirement that nursing homes must report “communicable diseases, healthcare-associated infections and potential outbreaks” to the Centers for Disease Control and Prevention.² Chatterjee and her colleagues took data collected from state governments and departments of public health from 23 states and the District of Columbia from April 22 to April 29. Since states reported on the number of cases differently, the researchers did not collect the case numbers.

Then, they took the Medicare provider numbers for the facilities reporting cases and linked it to Medicare.gov’s Nursing Home Compare to get facility characteristics and quality. They also looked at the Certification and Survey Provider Enhanced Reporting data for other characteristics. Furthermore, the researchers looked at the counties surrounding these facilities for their COVID-19 cases per 100,000 residents as of April 29, 2020.

The sample for the study included 8,943 nursing homes in the 23 states and the District of Columbia, with 3,021 reporting COVID-19 cases by April 29. The researchers found that the facilities that reported COVID-19 cases had more health deficiencies, emergency preparedness deficiencies, reported incidents, and substantiated complaints than the facilities that did not report cases.

In addition, more for-profit facilities and more facilities that had a higher mean percentage of Medicaid-insured residents reported cases. The

most significant finding was that the rate of COVID-19 cases was nearly twice as high in counties where facilities reported cases.

“Nursing homes with COVID-19 infections were in counties with high community rates,” said co-author **Rachel Werner**, MD, PhD, on her Twitter account. Werner is the executive director of the Leonard Davis Institute of Health Economics at the University of Pennsylvania. “The pandemic isn’t a problem in isolated nursing homes. It’s everywhere the infection is.”

Need for Funding

“In addition to better infection control in surrounding communities, nursing homes need resources,” Chatterjee said on her Twitter account. “Chronic underfunding has made it very hard for them to respond to the pandemic. Better data and higher wages for nursing home workers are good places to start.”

CliftonLarsonAllen Wealth Advisors in Minneapolis found evidence of severe financial pressures for skilled nursing facilities (SNFs) when it examined SNF cost-reported data released by CMS as of July 2019. The company’s “34th SNF Cost Comparison and Industry Trends Report” found that, although even the top quartile of SNF financial performers are reporting diminished returns, the bottom quartile is “spiraling” to the point of possibly going out of business. “The concern has been documented in a number of articles in 2019, reporting SNF closures, receiverships, and bankruptcies, particularly in states where Medicaid rates are among the lowest in the country,” the report stated.³

The financial trends show that “many operators are struggling to generate sufficient cash flow, are taking out additional financing to support operations, and do not have excess funds to reinvest in their communities. Without some disruption to status quo operations, we do not see this trend reversing in the near term,” the report said.

“Many nursing homes have been underfunded for decades, although, unfortunately, we didn’t have the data to assess whether the financial status was related to the differences we saw,” Chatterjee says.

The research from Chatterjee and her colleagues points to a higher COVID-19 infection rate in for-profit facilities. A recent study shows that private equity (PE) investment in nursing homes, with the strategy of increasing profits, has led to declines in patient health and compliance with care standards.⁴ PE firms now own more than 11% of all facilities, the study said. “Following buyouts, we observe higher patient volume on the extensive and intensive margins, leading to an increase in bed utilization. We also find a robust decline in nursing staff, leading to greater decline in per-patient nursing staff availability.”

The study found significant declines in outcomes associated with quality of care, such as “staff per-patient, readmission rates, and ultimately in Five Star ratings awarded by the federal government.”

“Nursing homes care for aging adults with chronic conditions and have experienced years of declining revenues and financial instability,” Chatterjee and her colleagues said. “These factors have made many facilities ill prepared for a pandemic, and stemming the spread of COVID-19 in nursing homes will not be easy.”

Staff in Danger

As the COVID-19 research shows, nursing home infection rates reflect their local community infection rates. One reason could be worker mobility. “Due to low wages, a large portion of nursing home workers have multiple jobs or are employed at several different nursing homes,” Chatterjee says. “This could be a possible vector for transmission given the association we saw with community-case rates of COVID-19.”

A recent study indicates that low-income healthcare workers (HCWs) are especially susceptible to illness.⁵ The researchers looked at interviews from the National Health Interview Surveys taken between 2007 and 2014.

They further narrowed their sample to participants 30 to 64 years of age. They defined HCWs as any individual working in hospitals or health services. The researchers looked at the workers’ mortality and their self-reported annual family income.

They found that mortality rates among HCWs decreased with income and that the lowest-income HCWs had a nearly six-fold higher risk of death relative to the highest-income HCWs.⁵ “Our findings suggest that further growth in job opportunities for low-income HCWs is unlikely to mitigate widening income-based longevity gradients in the [United States]. This is particularly worrisome for underrepresented minorities and women, who comprise the bulk of low-income HCWs,” the researchers said. “These findings also have implications of the COVID-19 pandemic, given the intersecting risk factors of direct exposure, medical comorbidities, and poverty faced by low-income HCWs. More generally, given that healthy HCWs are

critical for a well-functioning health system, reducing these disparities may improve healthcare delivery and quality.”

“In addition to better infection control in surrounding communities, nursing homes would benefit from more dedicated resources given their history of chronic underfunding and low wages for nursing home workers,” Chatterjee says.

Transformation Needed

A recent perspective in the *New England Journal of Medicine* said “COVID-19 has exposed the cracks in our tenuous system of providing and funding long-term care” and called for a transformation in how long-term care is paid for and provided.⁶

First, the authors said, Medicaid should invest considerably more in care in all settings, including home-based care. Second, families need “safe, affordable residential options,” such as smaller-scale, high-quality group models. Finally, Medicare and Medicaid should reconsider their “piecemeal approach” to paying for long-term care.

The authors advocated for more comprehensive funding through existing social insurance programs or stand-alone universal long-term care insurance for everyone. “[We] need a combination of funding, regulation, and a new strategy that fully supports a range of institutional and noninstitutional care,” they said.

“We are in a moment of crisis for nursing homes. Now should be a time of reckoning with the fundamental flaws in the organization of long-term care in this country,” the authors said. “There are no easy fixes, but we must do better.” ■

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Study of SARS-CoV-2 Finds Airborne Particles, but Are They Infective?

By Melinda Young, Medical Writer

A pre-published study under peer review suggests particles of SARS-CoV-2 can linger on surfaces and travel in the air beyond six feet. Ongoing work is bolstering the initial findings, says **Joshua Santarpia**, PhD, an associate professor of pathology and microbiology at the University of Nebraska Medical Center.

“Clearly, there is no proof of airborne transmission yet. But we feel like with this and several other studies, there is enough information to suggest that for healthcare workers, airborne isolation is warranted,” he says. “There has been a lot of discussion about ‘We don’t know enough to say whether this is airborne or not.’ I think there is a lot of evidence that suggests it could be. That to me is enough to tell a healthcare worker to protect yourself as much as you can.”

Santarpia and colleagues studied the environment of 13 patients confirmed with COVID-19 infection, collecting air and surface samples in isolation rooms to examine viral shedding.

“While all individuals were confirmed positive for SARS-CoV-2, symptoms and viral shedding to the environment varied considerably,” the authors noted. “Many commonly used items, toilet facilities, and air samples had evidence of viral contamination, indicating that SARS-CoV-2 is shed to the environment as expired particles, during toileting, and through contact with fomites.”¹ Santarpia and colleagues added that disease spread is indicated through both

direct contact (droplet and person-to-person) and indirect contact (contaminated objects and airborne transmission), supporting the use of airborne isolation precautions.

Controversial Findings

Although still subject to peer review, the findings are controversial because public health officials originally recommended N95 respirators for healthcare workers treating COVID-19 patients under airborne precautions. The recommendation was temporarily amended to wearing surgical masks if N95s were not available, a stopgap measure that could be reversed as soon as supplies were in stock. That wording appears to have been dropped from current CDC recommendations, which present a variety of options to preserve PPE and reuse N95s if warranted.²

The patients were admitted to the Nebraska Biocontainment Unit (NBU) for individuals requiring hospital care, and the National Quarantine Unit (NQU) for isolation of asymptomatic or mildly ill individuals not requiring hospital care. The patients had private rooms with a bathroom. Healthcare workers wore full personal protective equipment (PPE) with N95 respirators in accordance with airborne precautions. Samples were obtained at various times during hospitalization. The researchers took surface and air samples.

Of the 163 samples collected in the study, 77% had a positive

polymerase chain reaction (PCR) result for SARS-CoV-2. Overall, 77% of all personal items sampled were determined to be positive for SARS-CoV-2 by PCR. Eighty-three percent of cellphones tested positive, as did 65% of in-room TV remotes. Room toilets were 81% positive, as were 75% of the bedside tables and bed rails and 82% of the window ledges. Sixty-three percent of in-room air samples were positive, as were 67% of hallway air samples, the researchers reported.

“Air samples that were positive for viral RNA by reverse transcription PCR were examined for viral propagation in Vero E6 cells,” the authors concluded. “Cytopathic effect was not observed in any sample, to date, and immunofluorescence and western blot analysis have not, so far, indicated the presence of viral antigens suggesting viral replication. However, the low concentrations of virus recovered from these samples makes finding infectious virus in these samples difficult. Further experiments are ongoing to determine viral activity in these samples.” Those experiments are showing more signs of viral replication, which should eventually bolster the equivocal findings in the pre-published paper, Santarpia says.

“I believe we had some pretty solid evidence that we were seeing replication in cell culture from one of the surface samples in this study,” he explains. “That is complicated by peer review. There is disagreement whether we demonstrated that or not. In the studies we have done since, we are seeing replication in

some fraction of samples we are taking. I would say it is certainly possible; it is not yet proven.”

Finding particles beyond the six-foot social distancing parameter was not that surprising, but the question again is whether they would be infectious. There have been studies since “that indicate the even larger droplets are going to go farther than six feet, which sort of makes sense intuitively,” Santarpia says. “We are working to determine particle size right now, but it does jibe with everything people are working on. [Six feet] is completely arbitrary. The particle size distribution is pretty broad, depending on what [people] are doing.”

For example, some particles in hallways could have been caused by air flow changes as healthcare workers exited the rooms. No healthcare workers were infected, underscoring that wearing full PPE under airborne precautions protects workers from occupational transmission of the coronavirus.

“Taken together, these data indicate significant environmental contamination in rooms where patients infected with SARS-CoV-2 are housed and cared for, regardless of the degree of symptoms or acuity of illness,” the authors concluded. “Contamination exists in all types of samples: high- and low-volume air samples, as well as surface samples,

including personal items, room surfaces, and toilets.” ■

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Hospitals Cut Common Infection Cases by Half with Scalable Process for System Goals

By Greg Freeman, Medical Writer

Typically, healthcare mergers have not led to consistent improvements in quality and outcomes. Research suggests mergers may cause a quality decline. When hospitals in Massachusetts were facing a merger, leaders sought to address the quality issue head-on and achieved substantial improvements in some categories, including a reduction in *Clostridioides difficile* cases.

When leaders from the Lahey Clinic and Beth Israel Deaconess in Cambridge, MA, announced their intentions to merge in 2017, multiple facilities took the opportunity to set quality goals that would improve outcomes and value. Years later, the newly formed Lahey Health System has made significant improvements, including a significant reduction in *C. difficile* cases.

When merger talks began, participants held learning sessions and roundtable discussions to confirm the system’s commitment to providing high-quality, high-value care, says **Barbara A. Savage**, director of performance measurement at Beth Israel Lahey Health. Quality goals were set with input from local leaders and a chief quality officer, says **Richard Iseke**, MD, chief quality officer at Beth Israel Lahey Health.

The initial quality improvement meetings led to a set of consensus-driven goals with appropriate threshold, target, and outcome criteria for incentive-based programs. The goals they set were reducing readmission rates, reducing *C. difficile* infections, and improving the patient experience.

Lahey assembled a forum for chief medical officers and chief nursing

officers. That was expanded to include the quality and risk leaders from each facility or organization, along with patient experience leaders, physician-hospital organization leadership, human resources and employee health, and the chief medical informatics officer.

The chief quality officer and system performance measurement director worked together to develop a reporting calendar that would be used to set data submission dates. Data were reviewed in the forum before submission to the system and entity boards. Any deviations from the goal pathways were discussed in the forum, and the affected entity presented plans for addressing the problem.

Over three years, the effort produced significant improvement in reaching goals set by the health system and also in metrics related to

performance on commercial value-based contracts, Iseke reports.

New Merger Revives Goals

Then, in 2019, Lahey Health System merged with seven other hospitals to create Beth Israel Lahey Health. Again, hospitals sought to improve service rather than succumbing to a possible downgrade in quality. Participants used the Lahey Health System framework to establish goals with broad consensus of leadership, Iseke says.

The board of trustees developed four goals based on the recommendation of the 10 hospital boards and their quality leaders: reducing *C. difficile* cases, reducing hospitalwide readmissions, improving Hospital Consumer Assessment of Healthcare Providers and Systems responsiveness scores, and creating an ambulatory measure focused on diabetes care.

Even deciding on the goals so soon after the merger was an accomplishment, says **Yvonne Cheung**, MD, MPH, chief quality officer and chair of the department of quality and safety at Mount Auburn Hospital in Cambridge, MA, part of Beth Israel Lahey Health.

“These are all institutions that, the day before the merger, were competing. The day after, they were sharing data and collaborating on best practices,” she says. “One of the best things we did was to have everyone meet in person and build relationships face to face. Then, it became easier to share data, show what we did well, [and] what we wished we were doing better.”

The health system focused on *C. difficile* because rates were high at the facilities, Iseke says. These infections

affect patients significantly and put a heavy burden on staff.

Cheung notes *C. difficile* is a preventable hospital-acquired complication, making it a compelling choice for the health system’s quality improvement goals.

THE QUALITY TEAM MONITORED MONTHLY SCORECARDS. FOR THE 12 MONTHS ENDING MARCH 2020, *C. DIFFICILE* CASES WERE DOWN NEARLY 50% FROM THE PRIOR YEAR.

To reduce *C. difficile* cases, the health system focused on total cases to facilitate communicating goals and progress throughout the system, Iseke explains. Individual hospitals established goals that would improve value-based scores.

There were 389 *C. difficile* cases in the health system in the 12 months ending March 31, 2019. Quality leaders endorsed the initiative in April 2019, after which the chief medical and quality officers began sharing best practices for standardized testing protocols and antibiotic stewardship programs.

The improvements had been established in most of the hospitals

by September. From there, the quality team monitored monthly scorecards. For the 12 months ending March 2020, *C. difficile* cases were down nearly 50% from the prior year.

“When we expanded to the bigger hospital system, the quality working group was able to expand and spread the model that had been successful before. [We] have been, collectively, able to move the needle, with a lot of great knowledge and information-sharing,” Cheung says. “We went from competitors to collaborators.”

Savage notes the *C. difficile* strategy and other interventions all were evidence-based. “It was all about how to apply the evidence from randomized trials so that it will actually work to achieve the better health outcomes that we’re trying to achieve in the real world,” she says.

Board Wanted Faster Results

Iseke notes the effort in the first merger resulted from a challenge the health system board issued. During the second merger, administrators wanted to see even faster improvements. “We essentially set up the classic structure-process-outcome model. We set up a structure to bring people together from all the organizations on a regular basis, to review the needs of the patients, the community, our staff, the board, our clinical leaders,” Iseke says. “We came up with a matrix of goals that were common to all of our organization so that we could select what we should focus on.”

With the assistance of an outside consulting firm, the team used various quality maps to score goals based on how many of those aims a goal would hit.

“There was a fair amount of negotiation, but we used evidence-based medicine to show what we thought could be achieved. We also used trend lines to show what could be achieved in a certain period,” Iseke says.

“We used Vizient data, CMS [Centers for Medicare & Medicaid] data, BlueCross data. We also brought in our ACOs [accountable care organizations] and primary care contracting groups so that everyone was on the same train going in the same direction,” Iseke continues. “We set up a series of measurements and reviews and in-depth reviews with institutions that were lagging.”

One of the hospitals joining the Lahey Health System had been performing better with *C. difficile* than the other facilities. Thus, a quality leader from that hospital showed the other facilities how to include some of the best practices that worked well. Soon, the other hospitals were showing better metrics.

“The system created a learning network and a friendly competition to adopt what was working and to drop what wasn’t,” Iseke says. “When we came into the Beth Israel Lahey Health system, we had multiple institutions and multiple EMRs [electronic medical records]. We ... showed that you could take the same

model and scale it to three times the number of institutions.”

Whole Health System Affected

The team believed *C. difficile* affected the most people across the health system, Iseke says. All parts of the health system could contribute to improving *C. difficile* rates by optimal use of handwashing, antibiotics, and testing criteria, as opposed to some goals like readmissions and patient experience that some entities in the system could not affect so directly.

“We thought if we ever could bring the group together to use evidence-based medicine, it should be on *C. difficile*,” Iseke says. “We also had organizations in the earlier health system that had remarkably low rates. When we began to compare what they were doing, it turned out to be less around handwashing and more around being very detailed about strict criteria for locating, testing, and follow-up. *C. difficile* showed us that if you go after goals in a very rigorous, dramatic way, you can make dramatic improvements. Then, those practices can be applied to other quality goals.”

For example, a chief medical officer or chief quality officer may not be able to discuss *C. difficile*

rates and testing, perhaps deferring the question to the infection control department.

That should be a red flag, Iseke says. “A chief quality officer and medical officer have got to know those details. If you don’t have those two working as partners, you will end up with some gaps in your process. That often leads to the results you don’t want,” he explains. “*C. difficile* taught us some of those lessons, and we’ve now applied some of that knowledge to readmissions. For that goal, we found out that the quality officers and chief medical officers were trying to do too much themselves, not assigning people to carry out some of the team tasks and holding them accountable.” ■

SOURCES

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OSHA Enforcement Prioritizing Hazards Related to COVID-19 Response

By Greg Freeman, Medical Writer

The Occupational Safety and Health Administration (OSHA) stated it will prioritize investigations of complaints, referrals, fatalities, and hospitalizations related to the COVID-19 pandemic. That means

risk managers should prepare to respond effectively to employee complaints or OSHA queries.

Allegations of workplace safety hazards, such as a lack of personal protective equipment (PPE), could

prompt a full OSHA inspection, says **Joseph W. Dorr**, CIH, CSP, CHSP, assistant vice president with The Graham Company in Philadelphia.

Although the agency does not use a standard specific to infectious

disease, compliance officers could cite several other requirements, such as bloodborne pathogens, PPE, respiratory protection, or the general duty clause, Dorr says. OSHA also has emphasized that employers cannot retaliate against employees who allege unsafe work conditions related to COVID-19, he notes.

“Any employer-reported fatality, inpatient hospitalization, or any complaints alleging high exposure risk without adequate PPE may warrant an on-site inspection or Rapid Response Investigation,” Dorr says. “While practicing social distancing as advised by the Centers for Disease Control and Prevention, OSHA compliance officers may conduct inspections using video conferences, phone interviews, and video recordings from the workplace. Conversely, complaints asserting medium- to low-risk tasks — from those in roles that do not have high potential for exposure — likely will be addressed through an informal process not involving on-site inspections.”

OSHA also has issued a directive to compliance officers, instructing them to consider employers’ good-faith efforts to comply with standards regarding annual training, auditing, inspections, and more, Dorr says. Because the agency realizes many employers are operating under unique and challenging conditions, this directive allows them some leeway with routine items, as long as the employer has made its best effort to comply and use alternative methods to ensure employee safety, he says.

OSHA is constantly updating its enforcement criteria and efforts as more is learned about the disease and its transmission, Dorr says.

“Healthcare facilities should be looking out for complaints from staff who feel they do not have access

to proper PPE during this crisis, as it is imperative that employers provide proper PPE to protect against exposures to the virus,” Dorr says.

Some Risks Related to COVID-19

Employers are required to make a work-related determination of employee reports of COVID-19 illness, he says. This includes reporting fatalities and hospitalizations if determined to be work-related because of the coronavirus. OSHA had previously stated employers not in healthcare, corrections, or emergency response would not be required to record employee reports of COVID-19 infection because of its community spread unless they are aware of a workplace exposure, Dorr explains. But OSHA changed its enforcement guidance in May to require this reporting.

“Most importantly, if an organization receives Notice of an Alleged Safety or Health Hazard from OSHA, risk managers should carefully consider their response and immediately engage resources from their insurance broker to assist with answering the complaint,” he says. “A complete and detailed response can help satisfy a compliance officer’s request and prevent the need for an on-site audit of the facility and program.”

Some compliance risks may be strictly COVID-19-related, but they are unlikely to disappear soon. Even if the pandemic subsided, some COVID-19 hazards will persist.

“The unfortunate reality of the situation is that COVID-19 is not going away any time soon. The healthcare industry and society in general will experience lasting effects, such as the continued use of face masks, increased handwashing,

social distancing, and more, for the foreseeable future,” Dorr says. “While the path of the virus may subside, the risk associated will not. It is critical to learn from these experiences.”

The pandemic has served as a wake-up call for many organizations across different industries, Dorr notes.

Many pandemic risk management programs were established for a hypothetical situation and are proving difficult to follow in reality. Now, risk managers have to develop and implement them on the spot, then later refine and streamline, he says.

“Risk managers should take note of what challenges their organizations are currently experiencing so they can identify solutions to be better equipped in the future, should another pandemic or similar emergency situation arise,” he says. “Learning valuable lessons from this situation will ensure programs are well-documented and ready for rapid deployment in the future.”

Supply Scarcity a Challenge

One of the first challenges with the pandemic was the scarcity of necessary supplies, including PPE and cleaning chemicals. While most facilities had pandemic policies in place, many were based on general infection control. As a result, the facilities did not have the supplies on hand to actually execute their emergency plans, Dorr notes.

“For risk managers preparing for similar situations or future pandemics, slowly building a reserve of necessary equipment and supplies will be key to prevent the fear and price gouging that arose in the face of limited supply following the COVID-19 outbreak,” he says. “In addition, all healthcare facilities



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should maintain a rotating stock of emergency supplies so as not to run into issues with expiration dates of supplies.”

Risk managers also should revisit the policies and procedures they currently have in place related to the COVID-19 pandemic to evaluate their effectiveness, Dorr suggests. This includes policies related to cleaning procedures, proper disinfection methods, employee personal hygiene practices, communication protocols with stakeholders, procedures for contact tracing, and screening of visitors.

“It’s important to also remember that this does not only apply to internal policies. Risk managers

must also ensure any third-party contractors and service providers, such as equipment suppliers, janitorial services, and food manufacturers, are properly equipped to handle the facilities’ respective needs,” he says. “It is not just whether they have the appropriate supplies, but also whether they have the right protection and policies on their end to safely serve providers, residents, patients, and staff.” ■

SOURCE

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CME/CE QUESTIONS

1. According to research, what is thought to be a contributing factor for COVID-19 cases being reported in nursing homes?

- a. A lower percentage of Medicaid-insured residents
- b. A COVID-19 outbreak in the local community
- c. A non-profit status for the nursing home
- d. A lower number of complaints and deficiencies

2. According to Angela Vassallo, what has been a bright spot for nursing homes during the pandemic?

- a. More access to personal protective equipment
- b. More funding for nursing homes to fight the pandemic
- c. More collaboration across the continuum of care
- d. More education for staff on infection control

3. What is one reason Beth Israel Lahey Health focused on *Clostridioides difficile* as a quality improvement goal?

- a. Rates were high at many of the hospitals.
- b. It was the problem that resulted in the highest cost to the health system.
- c. The health system had not addressed the topic previously.
- d. The system’s board of directors insisted it be one of the first topics addressed after the merger.