Radiology Matters

Coping with COVID: Resilience in Radiology

Kerri Reeves

Kerri Reeves is a freelance writer based in Ambler, PA.

Since the COVID-19 pandemic took hold of the US in the spring of 2020, radiology has been on a roller coaster ride. Patient volumes initially plummeted, only to rise again to accommodate case backlogs once medical imaging departments reopened for non-emergent and elective procedures.

As a result, an intense need to operationalize numerous changes quickly has arisen without the availability of the resources necessary to meet all of them, especially where staffing and patient care are concerned.

But medical imaging departments and private practices have shown remarkable resilience in the face of the uncertainties brought about by COVID-19, says Kris Giordano, BSMI, RT(R)(MR), director of imaging at Robert Wood Johnson (RWJ) Barnabas Health Ambulatory Care Center in Livingston, NJ.

"Medical imaging, as a whole, has just been unbelievable under the pressures of the unknown," Giordano said. "Radiology departments have shown tremendous confidence and value in meeting the needs of both patients and health systems during this time."

Indeed, Giordano and other radiology department leaders agree the pandemic has served as a much-needed spark for making improvements as they head into 2022 with greater confidence in their ability to handle other challenges sure to come their way.

Mounting a Quick Response

By the spring of 2020, much of the US population fell under stay-at-home orders for COVID-19 mitigation. As a result, imaging volumes across the country fell—particularly for outpatient-heavy procedures—and revenues plummeted in tandem. Medical imaging providers were forced to temporarily eliminate non-essential procedures in order to comply with COVID-19 mandates.

"Obviously, radiology is still vital to the flow of health care," Giordano said. "MS [Multiple sclerosis] still flares up, strokes still occur, surgeries are still required. We really took a hard look at the prioritization of our volume to figure out how to optimize operations."

Some of the steps Giordano implemented included reducing exam hours and availability. While volume for many modalities dropped, cardiac magnetic resonance imaging grew exponentially, owed in large part to the impact of COVID-19 on cardiopulmonary function. Positron emission tomography (PET) volume, meanwhile, remained steady as oncologists continued to manage their patients reliant on PET results.

"In term of our usual operations, we had to pivot," explained Kernesha S Weatherly, DHA, MHA, CNMT, RT(CT), director of radiology at University of Alabama at Birmingham (UAB) Medicine, who manages both breast imaging and inpatient services.

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"It was important [to be] extremely intentional in our efforts to identify the patients we really needed to get in and those we felt comfortable pushing back," she said. Screening mammograms were halted entirely, while it was business as usual for diagnostic breast exams and non-elective inpatient services.

Jeff McGough, MSHA, CRA, UAB's director of ambulatory radiology services, explained that pivoting—particularly during the first two months of the pandemic—meant redefining "essential imaging."

"We continued to serve our oncology population across all services, but restricted everything else to patients with infection, ischemia, or acute neurologic changes. This action saw a 70 percent reduction in ambulatory imaging."

Meanwhile, at the Moses H Cone Hospital Campus of Cone Health in Greensboro, NC, Sherry W Nance, RT-RN, CNMT, MHA, director of radiology and imaging services, said the health system transitioned a vacated women's hospital into a temporary COVID-19 care center in an effort to group these patient populations separately from routine hospital patients across several settings.

"Volume fluctuations, staffing challenges, employee health screenings, ever-changing procedures and protocols, and virtual experiences became 'the name of the game,'" Nance said.

"Overcoming the initial fear of the unknown presented great challenges," she added, noting that personal protective equipment (PPE) availability and maintaining appropriate disinfection protocols have been ongoing concerns.

Giordano agreed. "We had to implement new guidelines and protocols and validate that staff were indeed performing the infection control practices and cleaning the equipment after every patient encounter," he said, observing that the new protocols added significant time to most imaging procedures.

"We had to clean the equipment in front of the patient to help alleviate anxiety," he said, adding that ultraviolet (UV) cleaning machines and robots were used, and the institution's environmental services department regularly deep cleaned the department.

Like other imaging centers throughout the US, RWJ has had to execute detailed patient screenings both ahead of, and upon patient arrival for, their appointments. Providers have also had to modify their check-in and waiting areas to comply with six-feet social distancing mandates, and to provide staff and patients with PPE, including MRI-safe facemasks.

Through measures like these, however, many providers have been able to increase their hours and reschedule appointments to relieve backlogs resulting from the "essential services-only" phase of the pandemic, said McGough, who managed UAB's social distancing efforts from May to October 2020, whereupon the department returned to normal operations.

"Since October, we have been able to maintain pre-COVID templates, and since March of 2021, we have exceeded pre-COVID volumes across all modalities while maintaining health screens, social distancing, and pre-procedure testing," he reported. "Our biggest challenge now is keeping up with demand. Since March, we have set volume records four times."

Managing Staffing Issues

As many providers experience a rebound in imaging volumes, staffing issues remain top of mind. Early in the pandemic, outpatient imaging centers in particular slashed their hours and reallocated staff. Giordano said he had to reassign some technologists to infection control duties, such as health screenings. The RWJ call center staff, which handles scheduling and authorizations, also began working remotely, which was a "huge win" for employees hoping to both remain working and manage at-home responsibilities, he added.

At UAB, shifts have been adjusted to accommodate their employees' at-home needs and to limit the potential for COVID-19 exposure, Weatherly said, while McGough added that the institution also continued to support the salaries of staff whose responsibilities were temporarily suspended.

Nevertheless, McGough said staff recruitment has been a challenge across most modalities as the department returns to higher, pre-pandemic patient volume. "Refilling positions has taken two to three times longer compared to historical practice," he said.

"As a level-one facility, a lot of employees have said, 'I'm burnt out. I can't do this anymore,'" agreed Weatherly. She said many staff are either retiring or moving on to per diem agencies, where they can often make more money.

"Our pipeline was also disrupted because schools closed, and they weren't doing clinicals. It's been uncomfortable all the way around," she said.

Weatherly suggests organizations undergoing similar challenges evaluate and adjust their staffing and compensation models to attract and retain staff post-pandemic. It's especially

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important to identify staff needs and how to meet them, she said.

"Many organizations haven't done a market review in an extended period of time due to the pandemic. People are leaving due to work intensity not corresponding with pay," she said. "As you navigate the 'new normal,' identify ways you can help your employees have a life outside of work—a real work/life balance. Because work is exhausting on a whole different level now."

Giordano says RJW has added per diem staff to meet the demands of the facility's nearly complete return to pre-pandemic patient volumes, while ensuring its ability to remain competitive with both compensation and job assurance. "We've really tried to provide as much security as we can in spite of everything going on around us."

Strategizing for 2022

Amid all the uncertainty, radiology decision-makers have found it challenging to develop strategic plans and allocate finances with confidence. "Budgetary plans were derailed while balancing routine business and community needs at the same time as juggling the impacts of the pandemic," said Nance. "Capital plans were negatively impacted. 'What once was' came to an immediate interruption."

McGough and Weatherly similarly said all capital projects at their facilities were put on hold for a year. They are now striving to play "catch up" with increasing construction pricing.

"We were looking to replace certain equipment, but what we're seeing across the board is that the cost of new construction is absolutely astronomical compared to what it was pre-pandemic," Weatherly said. "We're having those conversations now about whether this is the most appropriate time to move forward with these projects."

To forecast department needs for 2022, Giordano said he is comparing current referral patterns to those of 2019, since referrals of the past two years have been so far out of the norm. Heading into 2022, radiology leaders will likely leverage "lessons learned" from the pandemic for what ideally will be a more stable and secure year.

"Having gone through this experience, we will be in a much better position to react to unforeseen crises should another occur," said McGough.

For her part, Weatherly describes the pandemic as an opportunity to "eliminate the clutter" and identify "stress points" to improve workflows in radiology. She recommends that medical imaging leaders assess various areas for improvement.

"Ask yourself, 'How much time does it take from when an order is generated until the exam is complete?' How many of these steps could be cut out to make it a smoother, faster process? What can be streamlined, what should be revitalized, and what may be eliminated altogether?" she said.

"As an imaging leader, I can have the biggest impact on my staff by identifying ways to make processes easier and less complicated for them. Instead of avoiding pain points, leaders will address them."

Reference

1) Malhotra, A., Wu X., Fleishon, H., et. Al. (2020). *J Am Coll Radiol*. 17: 1525-31. Accessed via https://www.jacr.org/article/ S1546-1440(20)30809-7/pdf

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