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Commentary

A Lens on the Post-COVID-19 “New Normal” for Imaging Departments

Geoffrey M. Currie, BPharm, MMed RadSc (NucMed), MApp Mngt (Hlth), MBA, PhD*

School of Dentistry and Health Sciences, Charles Sturt University, Wagga Wagga, New South Wales, Australia

ABSTRACT

The COVID-19 pandemic has redefined the diagnostic imaging that is being practiced. It is important to consider how COVID-19 will

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reshape the practice in the post-COVID era. The “new normal” should reflect what has been learned from COVID-19 and preparedness for the future.

COVID-19 Impact on Practice

Across the globe, both the risks associated with COVID-19 to staff and patients and the reduction in demand for services during lockdowns have significantly influenced the medical imaging landscape. Staff particularly vulnerable to COVID-19 (including older staff, those with health issues, those with diabetes, and those with ethnicity risks) may have required redeployment, changes to job function, or leave from work [1]. Conversely, some staff may have been redeployed into the front line of COVID-19 management to assist in resource-depleted sites. While working from home was an option for some medical, management, and reception staff, most staff in diagnostic imaging cannot perform their duties from home. By choice or by force, many staff in diagnostic imaging took leave from work for periods during the COVID-19 crisis, in some cases unpaid leave. Indeed, staff redundancies, reduced hours, and reduced hourly pay rates were all experienced where patient load significantly changed. A combination of COVID-19-related stress, economic recession, and employment uncertainty is a cocktail potentially devastating to the diagnostic imaging workforce and their mental health and wellbeing.

The challenge as restrictions are lifted and the threat of a second wave emerges is to re-emerge with imaging operations while being aware of the potential for patients to be known or suspected to have COVID-19. It presents a delicate balance of

protecting vulnerable patients and staff while servicing our communities with lifesaving and life-changing imaging tests.

On a global scale, management of the first wave of COVID-19 has been reactive in nature. Actions and reactions in imaging departments generally reflect the same responses in the community; reduce the risk to staff and patients and increasing access to services. Hygiene, social-distancing measures, barrier protections, signage, masks, triage of patients, patient and staff testing, infection control measures, decluttering, and frequent cleaning of surfaces have all been widely implemented in response to COVID-19. In some cases, significant changes to protocol or procedure may have been made to reduce scan time, optimize workflow, use personal protective equipment, decrease risk of procedures (eg, replace all stress testing with pharmacologic stress).

Despite these measures, COVID-19 has had a dramatic impact on patient volumes in diagnostic imaging. The principal driver of decreased volumes is decreased patient mobility associated with “stay-at-home” restrictions imposed by governments. Compounding this has been decreased capacity because of more stringent requirements to space appointments, increase cleaning between patients, and maintaining staff safety. Furthermore, in many places, there remains a community-based fear of attending hospital or medical services even for those who are seriously ill. Decreases in radiology patient volumes by 90% are not uncommon across the globe. Radiology departments do not expect to return to either the volumes or the margins associated with pre-COVID practice with wider patient scheduling and increased costs of operation.

The New Normal

While a large number of interventions have been adopted during the COVID-19 crisis, it is worth considering which of

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* Corresponding author: Geoffrey M. Currie, BPharm, MMed RadSc (NucMed), MApp Mngt (Hlth), MBA, PhD, School of Dentistry and Health Sciences, Charles Sturt University, Locked Bag 588, CSU, Wagga Wagga, 2678 New South Wales, Australia.

E-mail address: gcurrie@csu.edu.au



Figure 1. “New normal” design for a department reception with clear signage, hand sanitizer, barrier protection, paperless registration, absence of brochures, and nonabsorbent easily sanitized surfaces. Image with permission and courtesy of PRP Imaging.

these strategies (and what others) might continue after COVID-19 recovery. A number of protocols or procedures should be common across all imaging departments. Some semblance of patient triage, pre-attendance survey, or onsite

monitoring is likely to persist beyond COVID-19 recovery as a general precaution for infectious disease. While barrier protection is likely to retreat slowly, good practice will demand ongoing increased attention to hygiene, hand washing,



Figure 2. “New normal” design for a patient waiting room and reception with sparse seating in a well-ventilated expansive space. Image with permission and courtesy of PRP Imaging.

and other measures of infection control (Figure 1). Waiting rooms should not return to the social hub of a diagnostic imaging department that it has been previously with measures to reduce the number of people and the people density within departments implemented. The waiting room should become a “no-waiting room” with rapid, paperless registration and departure, and creature comforts removed (eg, magazines, television programs, coffee machines) to discourage patients occupying the waiting room longer than necessary (Figure 2). Signage in the waiting room should remain prominent and updated, warning of risks and identifying procedures to be followed to minimize that risk. For busy waiting rooms, staff should be employed to act as “traffic controllers” to ensure compliance with the new norms. Departments will be retrofitted and future departments planned with zoning of patient versus staff only areas and biohazard versus hazard-free zones in a similar way that departments are planned with zoning of radioactive versus nonradioactive zones. This planning, especially if supported by color coding, will minimize accidental infection risks and provide security for those staff members more vulnerable to infectious disease. This may include redesign for automation and foot-controlled opening of doors, cupboards, and hand-washing facilities. Continuing professional development/education should include a broader program of credentialing and recredentialing for all staff in infection control. Standard operating procedures and risk manuals will, in the future, be developed with proactive management strategies for infection control and epidemic/

pandemic circumstances. Department preparedness should include a COVID kit—a self-contained vessel with all essential equipment to manage an infectious patient or scenario so that staff are not scrambling for basic personal protective equipment. The new normal is likely to include more flexible working hours for staff and remote duties where practical.

Conclusion

The issue with predicting what the “new normal” will look like post-COVID-19 is not what is known or even what we know we do not understand; it is that which we are not aware at this time that we do not know—perhaps a less confusing way of expressing the ideas made infamous by Donald Rumsfeld. There are lessons to be learned from the COVID-19 crisis that can improve practice now and better equip the industry for future events. The risk is to compartmentalize COVID-19 and repackage the strategies. While COVID-19 might be an unprecedented event and the most disruptive event in the professional lives of many, it is important to remember that COVID-19 was preceded by a previous “worst-case” event and will, no doubt, be relegated by a future event.

Reference

- [1] Currie, G. (2020). COVID19 impact on nuclear medicine: an Australian perspective. *Eur J Nucl Med Mol Imaging* 47, 1623–1627.