
COVID-19 Workflow Changes in Outpatient Imaging Centres



COVID-19 has caused a significant shift in how healthcare is delivered. In the U.S., New York City was the hardest hit within the New York State, reporting nearly 6400 new cases daily during the peak of the pandemic in April to June. The government implemented stay-at-home and social distancing measures in order to prevent overcrowding and reduce person-to-person contact and risk of spread of the virus.

While stay-at-home orders were relaxed eventually, there were significant safety concerns related to imaging procedures. Multiple workflow changes were introduced to ensure the safety of both staff and patients.

A study was conducted to determine the impact of COVID-19 workflow changes on patient throughput at outpatient imaging facilities of a healthcare system in New York City, the epicentre of the COVID-19 pandemic.

New workflows and policies were developed to allow for social distancing and to limit the patients' time spent in imaging centres. This had to be achieved while ensuring imaging quality, good patient experience and minimum effect on imaging capacity. Nine sub-committees were formed, including MRI, CT, ultrasound, breast imaging, PET/CT/nuclear medicine, radiography, radiologists, waiting room and front desk and scheduling/medical records team. Each team was required to develop methods that would ensure the safety of the patients, limit wait times and sustain image quality and imaging capacity.

Across the 17 outpatient imaging centres, workflow changes due to COVID-19 resulted in a 23% reduction in patient pre-exam wait time. Pre-exam wait times for MRI, CT, ultrasound, x-ray and mammography decreased by 28.4%, 16.5%, 25.3%, 22.8%, and 23.9% respectively

All non-essential exams were eliminated from March 2020 to May 2020. Necessary but non-emergent imaging exams were resumed in May. Screening questions were developed to assess the risk of patients to be either COVID-19 positive or potentially COVID-19 positive due to symptoms or exposure to COVID-19 positive contacts. In case of such a risk, a sub-specialist radiologist determined the urgency of the examination. If it was deemed necessary, the examination was scheduled with a notification that the patient was COVID-19 positive or potentially positive. Hence, the patient was isolated when they arrived. All walk-in examinations were discontinued to ensure such screening could take place before entering the centres.

Findings of the analysis show that across the 17 outpatient imaging centres, workflow changes due to COVID-19 resulted in a 23% reduction in patient pre-exam wait time. Pre-exam wait times for MRI, CT, ultrasound, x-ray and mammography decreased by 28.4%, 16.5%, 25.3%, 22.8%, and 23.9% respectively. In addition, MR exam times decreased by 9.7%, and the overall time of patients on-site decreased by 15.2%. The number of patients using a digital patient portal and completing forms electronically prior to arrival also increased.

Overall, these findings show that workflow changes necessitated by the COVID-19 pandemic have resulted in higher outpatient throughput.

Source: [Academic Radiology](#)

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