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## COVID-19 Pandemic Alters Paediatric Radiology

According to a report published in *Academic Radiology*, the COVID-19 pandemic has changed the demographics and clinical composition of exams in paediatric radiology practice.

Massachusetts General Hospital researchers quantified changes between pre-pandemic (15 September 2019 to 15 March 2020) and pandemic (15 March 2020 to 1 May 2020) periods at their radiology practice, accounting for age, modality, exam indication, need for anaesthesia/sedation, and exam completion or cancellation. The research team assessed these factors from 15,424 imaging exams in the electronic health record.

Of these exams, 13,715 were taken during baseline and 1,047 during pandemic periods. The research team found changes in the compositional mix of exams and a 'dramatic decrease in imaging volume for all imaging modalities across all age groups and study indications.'

These changes consisted of the following observations during the pandemic period:

- Radiography use fell from 70.4% to 62.4%.
- Exams for adolescents fell from 53.3% to 45.5%.
- Exams indicated for nontraumatic pain fell from 46.3% to 39.1%.
- Neonatal, infant, and early childhood imaging all increased.
- Computed tomography use increased from 5.9% to 7.4%.
- Ultrasound use increased from 13.5% to 18.3%.
- Oncologic imaging increased from 6.5% to 8.8%.
- Imaging for congenital/development disorder indications rose from 3.9% to 6%.
- Imaging under anaesthesia increased from 1.3% to 2.7%.

The study's authors postulate that cancelled outpatient clinic visits may have decreased nontraumatic pain indications in paediatric radiology, since as these normally generate these type of exam requests, or that these were simply deferred until a later time. Neonatal and MRI imaging were more likely to be completed during the pandemic, whereas fluoroscopy was not. Based on these results, the study's authors recommend technologists and radiologists assigned to fluoroscopy and radiography services be reassigned to other services in future pandemics. Furthermore, they feel the study underscores the 'need for clinical decision support tools for appropriateness of exam ordering and selection during a future resource-limited setting or even during non-emergent situations as a resource-conservation strategy.'

**Source:** ***Academic Radiology***

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