

Impact of the COVID-19 Pandemic on Radiology Physician Work RVUs at a Large, Subspecialized Radiology Practice

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Abstract

Introduction: As the COVID-19 pandemic continues, efforts by radiology departments to protect patients and healthcare workers and mitigate disease spread have reduced imaging volumes. This study aims to quantify the pandemic's impact on physician productivity across radiology practice areas as measured by physician work Relative Value Units (wRVUs).

Methods: All signed diagnostic and procedural radiology reports were curated from January 1st to July 1st of 2019 and 2020. Physician work RVUs were assigned to each study type based on the Medicare Physician Fee Schedule. Utilizing divisional assignments, radiologist schedules were mapped to each report to generate a sum of wRVUs credited to that division for each week. Differential impact on divisions were calculated relative to a matched timeframe in 2019 and a same length pre-pandemic time period in 2020.

Results: All practice areas saw a substantial decrease in wRVUs from the 2020 pre- to intra-pandemic time period with a mean decrease of 51.5% (range 15.4%-76.9%). The largest declines were in Breast imaging, Musculoskeletal, and Neuroradiology, which had decreases of 76.9%, 75.3%, and 67.5%, respectively. The modalities with the greatest percentage decrease were mammography, MRI, and non-PET nuclear medicine.

Conclusion: All radiology practice areas and modalities experienced a substantial decrease in wRVUs. The greatest decline was in Breast imaging, Neuroradiology, and Musculoskeletal radiology. Understanding the differential impact of the pandemic on practice areas will help radiology departments prepare for the potential depth and duration of the pandemic by better understanding staffing needs and the financial effects.