

# **As Subspecialization in Radiology Rises, the Need for Teleradiology Increases**

As the trend in Radiologists choosing to subspecialize rises, the number of generalists in Radiology will continue to fall. This trend towards hyperspecialization in Radiology could potentially hinder patient access. This concern has led to the use of Teleradiology services. These services are being used to provide high-quality Diagnostic Imaging reads to under-served geographic markets, thus, eliminating concerns related to quality of care and patient access.

## **Over a Five-Year Period, the Number of Generalists in Radiology Fell By 7.4 Percent**

Dr. Andrew Rosenkrantz is the Director of Prostate Imaging, an Associate Professor of Radiology and Urology as well as an Associate Director in the Abdominal Imaging Section of the Body MRI Fellowship Program at NYU Langone Health. Dr. Rosenkrantz and his colleagues decided to analyze the changes in subspecialties in Radiology. On Dec. 31, 2019, their findings were published in the Journal of the American College of Radiology.

According to the research conducted by Dr. Rosenkrantz and his colleagues, from 2012 to 2017, the number of generalists fell about 7.4 percent and, during that same timeframe, the number of subspecialists rose by 7.4 percent. The fact that these numbers are identical is not a coincidence. However, the drop in the number of generalists available has led to concerns that this lack of generalists may disrupt patient access to

Diagnostic Imaging services, thus, causing a decline in patient care. Nonetheless, this issue is being addressed through the use of Teleradiology.

## **The Criterion Used for Determining Subspecialization**

The team of researchers used five years of Medicare's fee-for-service provider payment data (collected between 2012 and 2017) to reach their subspecialization conclusions.

The criterion the researchers used for a Radiologist to be considered a subspecialist was the amount of time he or she spent on a specific specialty: The team deemed a Radiologist a subspecialist if he or she worked within a specific specialty for more than 50 percent of the time, whereas, the Radiologists who fell below this 50 percent threshold were classified as generalists.

## **A Closer Look at Subspecialty Proportions from 2012 to 2017**

In 2012, the proportion of subspecialists was approximately 37 percent, however, by the end of 2017, subspecialists had reached 45 percent. Meanwhile, from 2012 to 2017, the number of generalists in Radiology fell from approximately 63 percent to about 55 percent.

## **A breakdown of the subspecialty increases in Radiology Departments from 2012 to 2017:**

- **Breast** +3.7 percent.
- **Abdominal** +2.4 percent.
- **Neuroradiology** +1.8 percent.
- **Musculoskeletal** +0.8 percent.
- **Cardiothoracic** +0.2 percent.

## **There were two subspecialties that saw a decrease:**

- **Interventional Radiology** -1.2 percent.
- **Nuclear** -0.2 percent.

## **Radiologist and Practice Characteristics with Substantial Increases in Subspecialization**

Subspecialization among female Radiologists increased by 12 percent during the study period, those working in larger practices (with more than 100 members) had an increase of 7 percent and early career professionals were up by 10 percent. This move from general Radiology to subspecialization can be seen in 45 states. State-level increases had a weak correlation with the density of the population ( $r = +0.248$ ).

## **Rural Sites Are Using Teleradiology Services for Their Diagnostic Imaging Reads**

The researchers concluded that subspecialization may offer patients more sophisticated imaging, but the lack of generalists could negatively impact patient access. However, this issue of patient access can be addressed through the use of Teleradiology services.

The Diagnostic Imaging Industry has validated sub-specialty expertise over generalists in Radiology, therefore, rural sites have started contracting with Teleradiology companies to ensure their patients' images are being read accurately by a Radiologist with the appropriate subspecialty. One of the Teleradiology companies helping to solve this problem is The



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Best Practices in Radiology. This company offers sub-specialty reads, 24-hours a day, 7 days a week and 365 days a year. By using Teleradiology, rural areas can now have access to broad coverage and sub-specialty reads.

“At Collaborative Imaging, our state-of-the-art technology and dedicated physicians have allowed us to fully utilize subspecialists, as such, our members do not have to worry about Radiologist shortages.”

*Dhruv Chopra, CEO of Collaborative Imaging*

## **Smaller Groups of Radiologists are Seeking to Consolidate with Larger Groups**

Best Practice serves as one of the main reasons that smaller groups of Radiologists are seeking to consolidate with larger groups. Merging groups together allows for requisite coverage in sub-specialty reads. In addition, this consolidation eliminates the need for the smaller groups to recruit the sub-specialists that they are lacking.

## **Radiologist Salary to the Relative Value Units (RVU)**

Previously, whether a chest X-ray was read by a generalist or by a musculoskeletal Radiology (MSK) specialist, the pay was the same, \$9.00: Taking this into consideration, the salary range that a Radiologist would request cannot be justified. Consequently, the market and reimbursement have driven both sub-specialty and the desired Best Practice. Today, the salary of a sub-specialty Radiologist to the Relative Value Units is the norm.

*“The outlook for the Diagnostic Imaging Industry is clear, retiring Radiologists are much less likely to have trained for subspecialization than the incoming Radiologists; therefore, as the generalists retire, the number of subspecialists within the industry will continue to grow and Teleradiology will be used in under-served geographic markets to fill the gap.”*

*Dhruv Chopra, CEO of Collaborative Imaging*