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Radiology Practice in the United States: Overview from the American College of Radiology

Author	
Prof. Jonathan H.	
Sunshine	
Senior Director for	
Research	
American College of	
Radiology	
Also,	
Professor (Adjunct)	
Department of	
Diagnostic Radiology	
Yale University	
jsunshine@acr.org	

The US has approximately 30,000 post-training, professionally active radiologists, or about 100 radiologists per million Americans. Approximately 15 - 20% of radiologists are in academic practices. Almost all the rest are in private practice. However, 16 - 18% of all radiologists are in non-academic, multi-specialty private practices. Only 2 - 3% are in government practices. Around 20% of US radiologists are women.

Education and Training

Mandatory training for radiology consists of one clinical year after medical school and four years of radiology residency. Then, about 90% of residents voluntarily go on to a fellowship year of subspecialty training. Certification is by the American Board of Radiology (ABR). Certification is voluntary, but required by most employers. At least 97% of residency graduates now become board-certified. A few years ago, the ABR moved from lifetime certificates to 10-year certificates. Eventually, the final certifying exam will change to one that concentrates on three subspecialty fields chosen by the trainee. A preliminary exam will continue to cover the whole of radiology.

Obtaining a radiology residency position is highly valued. Radiology is relatively attractive because it has exciting technology, fairly regular work hours, and favourable incomes. There are approximately 1,000 radiology residency positions each year and, thus, approximately 1,000 trainees graduate into the workforce each year.

Three-quarters of radiologists report they currently subspecialise to some extent. On average, radiologists who subspecialise spend 40 - 60% of their work time in their subspecialty, 10 - 20% of work time doing general radiology, and the rest in other fields. The largest subspecialties among post-training radiologists are body/cross-sectional/abdominal imaging, interventional/ vascular radiology, breast imaging/women's imaging, and neuroradiology.

Work Patterns

Full-time radiologists work approximately 50 hours a week. Around 15 - 20% of radiologists work part-time, working about half as much. Full-time radiologists report an average of almost 40 vacation days a year. In addition, they have about 10 days a year for continuing education and professional society meetings. In addition, approximately 10 holidays annually is standard in the US.

Workload per average radiologist is growing rapidly, by 25% from 1991 - 92 to 2002 - 03, reaching 13,900 studies annually. Measured in relative © For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.

value units (RVUs), which take account of the amount of work involved in each study, the increase over the same period was more than 50%. CT and MRI grew the most.

Concerns about How to Manage Growing Workload

New technologies, such as 2- and 3-D viewing and PACS, are probably the main methods by which radiologists are doing so much more work without much longer hours. The use of external off-hours teleradiology companies has drawn much attention recently. They are now used by about half of US radiology practices to obtain preliminary interpretations of night and weekend imaging. Many radiologists are concerned this development will lead to radiology becoming a commodity and radiologists losing their status as professionals. Most recently, the percentage of practices using these companies apparently has ceased growing, and many practices are starting an internal equivalent arrangement. They do this either by hiring radiologists to routinely work nights and weekends, or by having each member of the practice work nights for a week or a month, rather than one night at a time.

Quality Improvement

Quality is a major issue, especially because, outside of hospitals, non-radiologists are free to purchase or lease imaging equipment and to perform imaging and interpretation with no oversight. In 1987, the American College of Radiology (ACR) developed a voluntary accreditation programme in mammography because of revelations of poor quality. Now, similar mammography accreditation is mandated by national law, and ACR is the main accrediting body.

More recently, the ACR developed voluntary accreditation programmes in essentially all other imaging modalities. Recent national legislation requires non-hospital facilities that perform CT, MRI, PET, or nuclear medicine to become accredited in those modalities by 2012. The ACR was a major force in getting this quality-increasing legislation passed, and is expected to become a major accrediting organisation.

Cost and Appropriateness Issues

The US spends far more per capita on healthcare than any other country, and imaging costs are growing particularly rapidly. Thus, there is constant pressure to cut the costs of imaging. The ACR is the radiology organisation principally involved in resisting these such cuts. Predominantly, payment for physicians in the US is a fee per individual service performed. Usually, income of a private radiology practice, after deducting expenses, is split evenly among partners. A radiologist usually becomes a partner in a private practice after about two years.

Appropriateness is another major issue, partly because extensive evidence shows that non-radiologists with a financial selfinterest in imaging order far more imaging for equivalent patients than physicians who do not self-refer. The ACR has developed an extensive set of appropriateness criteria. It is seeking to get clinicians to use these criteria, and it seeks regulatory and legislative changes that would curb self-referral.

References used in this article are available on request by contacting the Managing Editor at editorial@imagingmanagement.org.

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