

Radiology SHORTAGE Need in Scotland Underscores Need for a New Radiology Model

BY MIKE BASSETT

While Scotland continues to search for radiologists to fill the deepening gap in the workforce, Scottish radiology leaders are stressing the need for a big-picture solution they say is necessary to solve the problem long-term.

Scotland has been grappling with a radiology shortage for the last several years due to a combination of chronic vacancies, low trainee numbers and increasing demand. In a 2017 statement, the Royal College of Radiologists (RCR) reported that the shortage in Scotland is well recognized and documented and is currently worsening.

"There are short-term solutions underway, but the long-term strategy has to be producing more radiologists," said Grant Baxter, MD, chair of the Standing Scottish Committee of the Royal College of Radiologists (RCR).

In fact, Dr. Baxter and other Scottish radiology leaders believe there is a need to create a whole new radiology model that would include significantly increasing the number of radiology trainees each year — not only to fill current shortages but to address the wave of retirements planned in coming years.

The National Health Service (NHS) is addressing the shortage on a number of fronts. In February 2018, NHS launched a global outreach recruitment for radiology applicants in India, the U.S., Canada, western Europe and Australia. NHS is also investing in information technology (IT) to reach more patients remotely.

And in 2017, NHS unveiled plans to invest 9 million pounds in radiology programs to improve patient services and increase the number of specialist radiology training places in Scotland.

The NHS plans to fund an additional 10 radiology training posts each year for five years beginning in 2018. As of 2016 (the most recent data available), there were just over 300 radiologists working full or part-time and 115 radiologists in training in Scotland, which has a population of 5.4 million. But Dr. Baxter

said the number of radiology trainees continues to increase, and now stands at more than 130.

Hopefully, convincing radiologists that Scotland is a good place to practice will not be a difficult sell, said Edwin Van Beek, MD, PhD, SINAPSE chair of clinical radiology, Edinburgh Imaging, University of Edinburgh, and a native of The Netherlands who has been practicing in Scotland since 2009.

"I'm very happy where I am," Dr. Van Beek said. "And the academic side of radiology is well supported. The capabilities in Scotland are immense with a full national PACS and images that are available nationally. With the introduction of a Safe Haven environment, which includes all images from around Scotland linked to clinical data, many opportunities exist for big data research. In fact, that need for more government-funded radiology positions is a key factor in the radiology shortage not only in Scotland, but the entire U.K., radiology leaders say. The U.K. has only seven radiologists per 100,000 population, while the European average is 12 radiologists per 100,000 people, according to a 2016 census report by RCR, which has conducted a census for the past seven years.

Those numbers hold true in Scotland, where the number of radiologists trained over the last five years has increased by about 1 percent each year, compared to an increase in demand that runs 11-13 percent per year, Dr. Baxter said. In 2016, 26 radiology training positions were added in Scotland. That number needs to double, Dr. Baxter said.

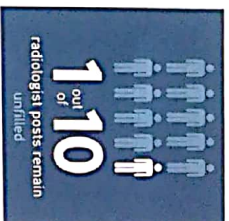
About one in six of our jobs is chronically under-filled, and we will be seeing a tsunami of retirements coming in the next three years," Dr. Baxter said.



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EDWIN VAN BEEK, MD, PHD

Radiology in Scotland — By the Numbers



Radiology Shortage Impacts the United Kingdom



"So, when you tie this all together, it is clear a number of significant challenges lie before us."

The irony, said Dr. Baxter, is that there is more than enough interest by aspiring radiologists to fill these vacant posts.

"When we advertise for a radiology training post we will turn down four people for that one post, so we have about a five-to-one application ratio for people who are appointable," Dr. Baxter said.

"And if we had more money and more radiology posts, we could appoint more people. But we have seen a long period of under-investment in radiology training in Scotland and the U.K., so we have not seen a significant increase in training numbers."

Other factors have contributed to the shortage as well, Dr. Baxter said, including the increasing demands for radiology services in the last 10-15 years. "And it's not just the numbers that are increasing; it is also the complexity of the imaging exams. So, demand for imaging has not been met by an appropriate increase in radiologist numbers," he said.

Teleradiology Use on the Rise

In more rural areas of Scotland, smaller hospitals are struggling to keep up with reporting of imaging exams, which has a direct impact on patients, Dr. Van Beek said. In those areas, IT capabilities are

being expanded to reach more of the population.

"What has happened is that there has been an increase in teleradiology capabilities," Dr. Van Beek said. "In Edinburgh, we have teleradiology services essentially covering a region of southeastern Scotland with about one million people."

But, according to the 2016 report by the RCR Standing Scottish Committee, outsourcing radiology services is not an optimal use of resources.

Between April 1, 2014, and March 31, 2015, Scottish radiology departments spent 5.25 million pounds on outsourcing (which included payments made to teleradiology companies, as well as extra payments to radiologists already contracted to their departments). The authors of the report pointed out that the money spent on outsourcing was equivalent to the combined salaries of 60 full-time radiology consultants, or 21 percent of the entire workforce.

In particular, Scottish radiology is especially struggling in terms of workload involving cross-sectional imaging. "We try to report all cross-sectional imaging within a week if it isn't urgent; if it is urgent, it is usually done within the same day," Dr. Van Beek said. "But the increased need for cross-sectional imaging has detrimentally impacted palm film reporting, and that is where we



Van Beek



Baxter

struggle the most. It is not uncommon to see delays of several weeks in the reporting of palm films."

In fact, according to that 2016 RCR statement, nine of out 10 hospitals in Scotland are unable to keep up with their daily imaging workload, with some patients experiencing reporting delays of a month or more.

While long-term fixes are in the works, improvements in technology will likely aid the situation in the near-term, Dr. Baxter said.

"We have a national system where we can see scans from anywhere in the country, but we can't report them. We can do that in our own small regions," Dr. Baxter said. "Hopefully, by 2019 our connection will improve so that someone in the south of Scotland can report from a hospital in the north, east or west and that in some way will help surmount some of these issues." ❖