Negative Perception of Pediatric Radiology May Explain Workforce Shortage

The perception that pediatric radiologists earn less money and are more limited in where they work were among the deterrents named by radiology residents surveyed in a recent study analyzing the persistent workforce shortage in the subspecialty.

The survey published in the September 2009 issue of the Journal of the American College of Radiology (JACR) used the online tool SurveyMonkey.com to randomly question selected radiology residents on issues such as fellowship and career plans as well as possible factors affecting fellowship choice. Of the 1,000 residents asked to complete the survey, 332 responses were tabulated.

“Residents want flexible job opportunities and fair compensation,” said Ryan Arnold, M.D., lead author of the study and a fellow at Children’s Hospital Boston. “There’s a perception that pediatric radiology is disadvantaged in these areas.”

Overall, the four most popular subspecialties named in the survey were body imaging at 16 percent, neuroradiology at 15 percent, interventional radiology at 14 percent and musculoskeletal imaging at 13 percent. Seven percent of respondents chose pediatric radiology, although the study authors said a response bias may have inflated the percentage as the questionnaire purposely identified the survey as a project of the Society of Pediatric Radiology (SPR).

Those who chose pediatric radiology ranked three factors higher than others: physician–to–physician interaction, physician–to–patient contact and altruism. By comparison, the three highest factors for the entire pool of residents were areas of strong personal interest (what I love doing), advanced/multimodality imaging and intellectual challenge.

Examining Deterrents to Pediatric Radiology

Followed by breast imaging and interventional radiology, pediatric radiology was named the third most difficult subspecialty to fill according to “Update on the Diagnostic Radiology Employment Market: Findings Through 2007-2008,” published in the July 2008 issue of JACR.

Approximately 57 pediatric radiologists are trained each year but not all stay in the U.S., according to Dr. Arnold and colleagues. Approximately 100 positions are advertised, the study said.

“Finding out what deters residents from choosing pediatric radiology has been helpful,” said Dr. Arnold. Respondents said they believe pediatric radiologists make $325,000 a year versus $385,000 for other subspecialties and are more limited in their place of work—mostly to academic centers, the survey showed.

Although there is no up-to-date comparison of salaries among all subspecialties, an examination of advertised positions showed opportunities for “partnership tracks in adult-centered practices, with an opportunity to read 50 to 100 percent pediatric cases,” according to the study.

“Subspecialists in these groups become partners after one to three years and enjoy equal earning potential in the partnerships,” the study said. Half of the advertised positions were in non-academic settings.

Pediatrics Must Lure Residents Early

Overcoming the perceptions identified in the study begins in residency or earlier, said Dr. Arnold, who said he was drawn to pediatric radiology during his second year of medical school.

“I saw the pediatric radiologist at our hospital interacting with patients and clinicians and she seemed to be making a real difference in patient care,” he said. “Radiology residents are the future of our subspecialty. They
need to provide inspiring, enjoyable experiences during pediatric rotations. These rotations also have to take place early in their training before fellowship applications are due.”

Clearly that is one of the biggest changes in the subspecialty in the past 10 to 15 years, said Richard Barth, M.D., radiologist-in-chief at Lucile Packard Children’s Hospital, a professor and associate chair of radiology at Stanford University and a member of the RSNA pediatrics subcommittee.

“If residents are exposed to exciting modalities, of course they are going to want to continue that in their fellowship,” Dr. Barth said. “Historically, pediatric radiologists suffered in not having some of those exciting modalities. They were relegated to doing more of the plain film work and didn’t have access to high-end procedures. That has changed a lot.”

Attending an SPR annual meeting with a respected mentor helped sway Dr. Barth in choosing the subspecialty, he said.

“This mentor really took me aside and talked to me about how much he loved pediatric radiology,” he said. “He really made me feel a part of the pediatric radiology family as a junior resident. I never looked back.”

At Children’s Hospital Boston, residents and fellows work with staff members who believe in what they are doing, said George Taylor, M.D., who co-authored the study, “SOS: Can We Save Pediatric Radiology?” published in the June 2005 issue of Radiology.

“This is a fun place to be,” said Dr. Taylor, radiologist-in-chief at Children’s Hospital Boston and the John A. Kirkpatrick Professor of Radiology at Harvard Medical School. “Residents get here and they love it.”

Dr. Taylor contrasts that to experiences where residents see practitioners who are spread too thin and then wonder, “Why would I want to do that?”

The Changing Face of Pediatric Radiology

Has anything changed since the 2005 Radiology article? Yes and no, Dr. Taylor said. Although the number of residents entering the subspecialty has not fluctuated much, the range of career paths is broadening, he said.

Dr. Taylor said he believes pediatric radiology will change over the next decade in part due to the increasing number of children from diverse backgrounds who will need care. He also believes smaller pediatric units will close and that higher-end care will shift toward larger medical centers. The growth of teleradiology will also have a centralizing impact.

The biggest surprise in the study was that imaging modalities ranked so high in residents’ fellowship choices, said Dr. Arnold. Researchers were also surprised that subjective factors such as personal interest and intellectual challenge outweighed objective factors such as compensation, call responsibilities and work hours.

There was a bit of a conflict with the information on compensation importance. “Favorable financial compensation” came out as No. 13 on a list of 20 factors for choosing a subspecialty. However, compensation concerns were the second-most important deterrent.

Promoting Pediatric Radiology a Must

The considerable change now under way in healthcare in general and overall makes it difficult to predict how pediatric radiology will change in the next decade, said Dr. Barth. “It’s like predicting interest rates.”

With the economy, resident education and healthcare all in a state of flux, “there’s no way to predict the future of the job market,” Dr. Arnold said. “The shortage is a little better than it was five years ago.”

Going forward, SPR is more aware of potential workforce shortfalls and has created a task force dedicated to keeping the specialty filled, said Dr. Arnold. He stresses the importance of emphasizing the many job opportunities, diverse practice setting and well-compensated private practice positions available to pediatric radiology graduates.

“Fortunately, as we promote the wide array of jobs—and incomes—available, residents can be reassured that they will have plenty of options,” said Dr. Arnold.

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