

# Bulletin



**making  
the right  
choice**

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## FEATURE

### 10 Making the Right Choice

Just as the organization's hiring team should be prepared to evaluate the needs and concerns of candidates, its leadership must value the process as a long-term investment — giving its team the time and resources needed to make the best match.



Trent P. Dittmer, MD, shows a presentation on chest radiographs to Zak, a sonographer at Masindi-Kitara Medical Centre in Uganda.

**OUR MISSION:** The *ACR Bulletin* supports the American College of Radiology's Core Purpose by covering topics relevant to the practice of radiology and by connecting the College with members, the wider specialty, and others. By empowering members to advance the practice, science, and professions of radiological care, the *Bulletin* aims to support high-quality patient-centered healthcare.



**QUESTIONS? COMMENTS?** Contact us at [bulletin@acr.org](mailto:bulletin@acr.org)

Digital edition and archives of past issues are available at [ACR.ORG/BULLETIN](http://ACR.ORG/BULLETIN).

## ALSO INSIDE

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By creating a culture that empowers its radiologists and RTs to speak up and work together, one radiology department has seen improvements in error reduction, self-reporting, and overall ownership of quality and safety.

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The ACR is responding to an NRC evaluation of the training and experience requirements for authorized users of certain diagnostic and therapeutic agents.

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Geraldine B. McGinty, MD, MBA, FACR, Chair



Robert S. Pyatt Jr., MD, FACR, Chair of the ACR Committee on Fellowship Credentials

Guest Columnist

# The Pathway to Fellowship

New changes will improve the FACR application process and ensure the honor is available to the many eligible members of the College.

Being named a Fellow is one of the highest honors the ACR can bestow on a member. ACR Fellows demonstrate a history of service to the College, organized radiology, teaching, and/or research. Approximately 10% of College members have been awarded this honor.

The Committee on Fellowship Credentials (CFC) measures each candidate's credentials against the nomination criteria rubric. Under this system, candidates are not in competition with one another and are measured against the outlined criteria. The CFC then forwards its nominations to the BOC for its review and approval.

There are three new changes in the application process for FACR candidates:

- The minimum number of years of membership has changed from 10 consecutive years post-training to 10 cumulative years post-training. The ACR recognizes that some candidates have had an interruption in their membership for a variety of reasons: moving to a new location/job, childbirth and child-raising, personal or close family members' serious health issues, and other factors.
- Professionalism has been incorporated into the application process, the letters of endorsement, and the attestation. Professionalism is one of the six core competencies of the Accreditation Council for Graduate Medical Education from when the Council defined *professionalism* in 2002. This additional component of professionalism has been incorporated into the ACR Fellowship guidance and application documents.
- The flow of accomplishments achieved in the nomination criteria has been improved — allowing candidates to claim achievements listed under the different years of cumulative membership, carrying these forward as they complete the application. This revision of the criteria ensures that candidates do not miss any of their achievements as they review their adherence in meeting the critical nomination criteria.

These changes are intended to make the Fellowship requirements more inclusive of the varying experiences of our members. No career path is identical, and our goal is to ensure Fellows of the College reflect the richness of our membership.

One group of members particularly affected by this change will be military radiologists. These physicians often move around, and it can be challenging for them to be active in their state chapters. That's an issue that

has prevented some from applying for ACR Fellowship in the past. The CFC has now created a channel for military radiologists, bypassing their state chapters (which is an optional membership), as many do not have long enough established contact to develop a state chapter relationship. Military applications are exempt from chapter review and military radiologists can submit their applications directly to the College.

We hope these changes will improve the application process and increase the number of eligible members applying for the FACR. As our specialty and society become more welcoming of different life experiences, the ACR is eager to ensure that ACR Fellowship is available to all members who have demonstrated outstanding service to the ACR, their chapters, organized medicine, clinical research, or training. **B**

## Know the Requirements

For FACR candidates, the nomination criteria are a critical component to meet, and it is where the number of years of membership play a key role — be it 10–11 years or 18–19 years of membership, for example. If the nomination criteria are not met at the proper year level, the candidate will not be approved at that year level but could be approved with a deferral for up to three more years of membership and would receive the award at a future date. As a refresher, among other requirements, candidates must fulfill criteria under one or more domains:

- Service to the ACR at national or chapter level(s) and/or organized radiology/medicine at national, regional, state, or local levels
- Outstanding teaching of diagnostic radiology, IR, nuclear medicine, radiation oncology, and/or medical physics
- Significant scientific or clinical research in radiology or significant contributions to the literature

## Know the Deadline

Each ACR chapter sets its own deadline to receive Fellowship application submissions. Check with your chapter for your submission due date or refer to the chapter deadline drop down menu at [acr.org/facr](http://acr.org/facr).



Review the ACR Fellowship Guidelines, ACR Bylaws, nomination criteria, or military nomination criteria prior to beginning an application at [acr.org/facr](http://acr.org/facr). For more information or to confirm your eligibility, please contact Julie Huxsoll at [FACR@acr.org](mailto:FACR@acr.org).

## ACR Announces 2020 Morin Medical Physics Fellows

Two medical physicists-in-training have been awarded the ACR's Richard L. Morin, PhD, Fellowship in Medical Physics. Crystal A. Green, PhD, of Duke University, and Marthony Robins, PhD, of Ohio State University, were selected from a pool of applicants, according to Mahadevappa Mahesh, MS, PhD, FACR, chair of the ACR's Commission on Medical Physics. "It is a great credit to these recipients that they were able to distinguish themselves among an accomplished group of their peers," Mahesh says. "The future of medical physics and its contributions to the ACR are bright."

Now in its second year, the Morin Fellowship is open to medical physics residents who are in the middle of the clinical training programs. Green and Robins will visit the ACR headquarters in Reston, Va., this month for a week of hands-on experience with ACR staff. They will return to the area to gain exposure to radiology governance at ACR 2020 in Washington, D.C., in May.



Crystal A. Green, PhD



Marthony Robins, PhD



## Celebrating 15 Years of Case in Point

One of the most popular benefits of ACR membership is the daily Case in Point®. Available only to members, this CME-bearing activity gives you the opportunity to earn 65 SA-CME credits each year, at no additional cost — a \$2,275 value.

Now in its 15th year, Case in Point continues to be a daily go-to activity for radiologists at all career levels — from residents to retirees. "It's my favorite kind of learning," says Amanda J. Ferrell, MD, a breast imager at Radiology Consultants in Little Rock, Ark. "You get some images, a didactic lecture, and answer some questions."

Renew your membership today at [acr.org/renew](http://acr.org/renew) to keep your access to this benefit and complete a case today at [acr.org/cip](http://acr.org/cip).

## IN MEMORIAM

### David C. Levin, MD, FACR



David C. Levin, MD, FACR, a past ACR Gold Medalist, passed away unexpectedly on Jan. 15. An icon in radiology, Levin had a distinguished career for over four decades. As professor and chair emeritus of the department of radiology at Thomas Jefferson University in Philadelphia, he continued working tirelessly in health services research, mentoring young radiologists, and pursuing his passion for cardiac imaging.

Levin became interested in medicine while serving as a fighter pilot in the U.S. Air Force. He subsequently attended medical school at Johns Hopkins University and did his residency at the University of California Los Angeles Medical Center. He then held successive faculty positions at New York-Presbyterian/Weill Cornell Medical Center, SUNY Downstate Health Sciences University, and Harvard Medical School. While he was head of cardiovascular imaging and IR at Brigham and Women's Hospital, he was appointed acting chair of that department. In 1986, he went to Jefferson as professor and chair of its department of radiology — a post he held until he retired in 2002.

Levin served as president of the Society of Chairs of Academic Radiology Departments and chair of the Council on Cardiovascular Radiology of the American Heart Association. He served on the editorial boards of six leading radiology journals, published 314 papers and 362 abstracts, and delivered 670 presentations at national meetings or as an invited lecturer. His research interests included cardiac and vascular imaging and interventions, and over the past two decades, he focused on economic issues in radiology. In the radiology community, he was a household name as a champion of the appropriate use of imaging and the promotion of radiologists as the most qualified physicians to perform imaging.

In addition to the ACR Gold Medal, Levin received the Gold Medals of the RSNA, the Association of University Radiologists, the American Roentgen Ray Society, and the Society of Interventional Radiology.

According to Vijay M. Rao, MD, FACR, the David C. Levin professor and chair of radiology at Sidney Kimmel Medical College of Thomas Jefferson University and senior vice president and chair of Enterprise Radiology and Imaging at Jefferson Health, "The radiology community and the Jefferson department of radiology mourn the loss of an influential leader, an awesome mentor, educator, and a role model. He touched many lives and mentored future leaders. For many of us, more importantly, he was a dear friend. His extraordinary legacy will live on forever."

Learn more about Levin's life and work at [bit.ly/RSNA\\_Levin](http://bit.ly/RSNA_Levin).

## ACR Announces 2020 Hillman Fellow in Scholarly Publishing



Anand K. Narayan, MD, PhD, has been awarded the ACR's Bruce J. Hillman Fellowship in Scholarly Publishing. Narayan, who practices breast imaging at Massachusetts General Hospital, completed his residency at the Johns Hopkins School of Medicine and fellowships at Memorial Sloan Kettering Cancer Center and Johns Hopkins. Narayan will visit the ACR headquarters in September, kick off a publishing project, and join the journal's editorial board.

Now in its sixth year, the Hillman fellowship provides a concentrated experience in medical editing, journalism, and publishing for an interested and qualified staff radiologist or radiologist-in-training. The experience supports talented physicians who wish to pursue medical journalism as a part of their careers. Applications for the 2021 fellowship will open winter 2020.

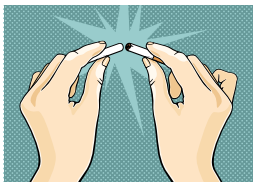
Learn more about the Hillman fellowship at [acr.org/JACR-Hillman](http://acr.org/JACR-Hillman).

“

**45 is definitely not too young to start colorectal cancer screening, especially when 1 in 7 are now diagnosed under the age of 50.**

— Kevin J. Chang, MD, director of MRI at Boston University Medical Center, at [bit.ly/Rad-Patient](http://bit.ly/Rad-Patient)

”



### Counseling Patients to Quit Tobacco

The ACR is collaborating with the Respiratory Health Association on a free webinar that will teach radiologists and their staff how to more effectively set patients on a path to smoking cessation. The program is open to all providers and staff members who interact with patients during their medical care.

Research shows that just three to 10 minutes of counseling from a healthcare provider can increase an individual's success in quitting by 60%. The 60-minute “Counsel to Quit” webinar, taking place on April 2 at 2 p.m. ET, will teach participants how to screen patients for tobacco use, engage in initial conversations about cessation, and connect them with appropriate cessation treatment options.

For more information and to register for the webinar, visit [bit.ly/ACR\\_RHA](http://bit.ly/ACR_RHA).



## Become an Imaging 3.0 Champion

Imaging 3.0<sup>®</sup> champions serve as models for peer learning — change-makers in the specialty who have demonstrated innovations upon which we can build our cumulative knowledge and grow the community of champions. The ACR invites all radiology practices to submit their CDS-based transformation projects for consideration as a 2020 Imaging 3.0 champion. The 2020 topic is improving care via evidence-based imaging and CDS. Project goals involve:

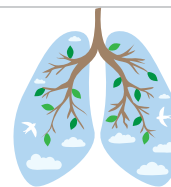
- Demonstrating how an idea presented in various Imaging 3.0 case studies sparked another project
- Promoting physicians learning from each other — sharing what works as well as barriers, challenges, and lessons learned
- Communicating how you have supported the use of evidence-based guidelines and, as applicable, the use of CDS to improve value-based imaging care

The project timeline is as follows:

- June 1: Register your project: a new project just getting underway, one in process, or a project recently completed.
- Sept. 1: Submit your 2020 project.

The top project will be recognized at the ACR Conference on Quality and Safety, Oct 22–24, in Washington, D.C.

Learn more and submit your project at [acr.org/I3-Champions](http://acr.org/I3-Champions).



### Advancing Lung Cancer Screening Regionally

Lung cancer screening (LCS) advocates in Chicago and Denver will meet in May to help advance LCS in their communities. The Colorado Learning Collaborative on LCS will take place in Denver on May 11, 2020, and the ACR LCS Midwest Symposium will take place in Chicago on May 29, 2020. The meetings will engage all types and levels of clinicians from local LCS sites as well as community health leaders and patient advocates to address key needs and concerns, including quality improvement in patient tracking, follow-up of abnormal scans, shared decision-making, smoking cessation, and other priority topics. Participation is open to anyone with an interest in building or expanding LCS at their institutions.

For more information on the Colorado meeting, visit [acr.org/LCS-Colorado](http://acr.org/LCS-Colorado). For more information on the Chicago meeting, visit [acr.org/LCS-Chicago](http://acr.org/LCS-Chicago).

## CALENDAR

### April

- 3–5 Body and Pelvic MR, ACR Education Center, *Reston, Va.*
- 15–17 Musculoskeletal MR (Elbow, Wrist/Hand, and Specialized Topics), ACR Education Center, *Reston, Va.*
- 16–19 SBI-ACR Breast Imaging Symposium 2020, Sheraton Denver Downtown Hotel, *Denver*
- 20–21 Breast MR With Guided Biopsy, ACR Education Center, *Reston, Va.*
- 23–25 Breast Imaging Boot Camp With Tomosynthesis, ACR Education Center, *Reston, Va.*
- 30–  
May 1 CT Colonography, ACR Education Center, *Reston, Va.*

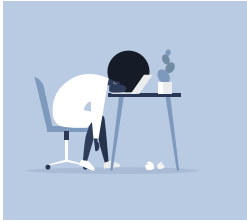
### May

- 7–9 Abdominal Imaging, ACR Education Center, *Reston, Va.*
- 9–15 SPR 2020 Annual Meeting and Postgraduate Course, Intercontinental Hotel, *Miami*
- 11–13 Emergency Radiology, ACR Education Center, *Reston, Va.*
- 16–20 2020 ACR Annual Meeting, Washington Marriott Wardman Park Hotel, *Washington, D.C.*
- 29–31 Coronary CT Angiography, ACR Education Center, *Reston, Va.*

### June

- 1–3 ACR-Dartmouth PET/CT Course, ACR Education Center, *Reston, Va.*
- 4–6 Breast Imaging Boot Camp With Tomosynthesis, ACR Education Center, *Reston, Va.*
- 8–10 High-Resolution CT of the Chest, ACR Education Center, *Reston, Va.*
- 15–17 Neuroradiology — Head and Neck, ACR Education Center, *Reston, Va.*
- 18–19 Prostate MR, ACR Education Center, *Reston, Va.*
- 26–28 Cardiac MR, ACR Education Center, *Reston, Va.*

*Note: The recent COVID-19 outbreak may affect some of these meetings. Please check with the meeting organizers for more information.*



## Easing the Burden of Burnout

Burnout exacts a distressingly high toll, with almost half of radiologists reporting burnout in the 2019 Medscape Radiology Lifestyle Report.<sup>1</sup> The ACR has developed the ACR Radiology Well-Being Program to help. The program, formed by the Commission on Human Resources and the Commission on Publications and Lifelong Learning, provides you with tools and resources to assess your level of wellness and identify ways to improve

your well-being over time. All ACR members, including residents, fellows, and medical students, receive free access to the following at [acr.org/Member-Resources/Well-Being](https://www.acr.org/Member-Resources/Well-Being):

- The Well-Being Index (WBI) survey tool, created by the Mayo Clinic to help physicians anonymously self-evaluate their level of well-being
- A toolkit of radiologist-specific, high-impact articles and resources on critical well-being topics such as relationship and work-life balance, health behavior, and emotional concerns
- A well-being curriculum for residents, medical students, and career physicians
- An ACGME-aligned curriculum for residency program directors, program coordinators, and other program leaders designed to meet specific well-being requirements for residency programs

Contact [copllstaff@acr.org](mailto:copllstaff@acr.org) if you have a resource or feedback you would like to share.

1. Kane L. Medscape radiologist lifestyle, happiness & burnout report 2019. *Medscape*. Published Feb. 20, 2019.

## You're One Year Closer to FACR

Renew your 2020 membership today and get one year closer to qualifying for the FACR distinction. The FACR is one of the most prestigious recognitions available to members who have been with the College for a minimum of 10 years. Beginning this year, for the first time ever, your 10 years is counted cumulatively, not consecutively.

Adding FACR to your credentials symbolizes exceptional achievement in the fields of diagnostic radiology, IR, nuclear medicine, radiation oncology, and/or medical physics. Only 10% of College members have been awarded this honor.

Renew today at [acr.org/renew](https://www.acr.org/renew). Determine your eligibility and identify your chapter's application submission deadline at [acr.org/FACR](https://www.acr.org/FACR).



Our U.S. healthcare system can, for some, be the best in the world, and yet we know that for others it is far from that.

— ACR BOC Chair Geraldine B. McGinty, MD, MBA, FACR, at [bit.ly/VOR\\_Feb2020](https://bit.ly/VOR_Feb2020)





The role of peer review for medical journals is critical to ensure that high-quality science is published and to help authors improve their manuscripts prior to publication.

— Christoph I. Lee, MD,  
deputy editor of the *JACR*®, at [bit.ly/Peer-Review](http://bit.ly/Peer-Review)

To learn more about the perks of reviewing for *JACR*, head to [jacr.org/reviewers](http://jacr.org/reviewers).



(L-R) Terrance T. Healey, MD, Jeanna H. Barnes, MD, and David W. Swenson, MD, are pictured at the 2019 RADPAC Gala.

## RSVP for the 2020 RADPAC Gala

RADPAC® will host its annual gala at the International Spy Museum in Washington, D.C., on the evening of Tuesday, May 19. Join leaders in ensuring that radiology is well-represented in Washington by RSVPing at [bit.ly/RADPAC2020\\_RSVP](http://bit.ly/RADPAC2020_RSVP).

## What's Next for the RLI?

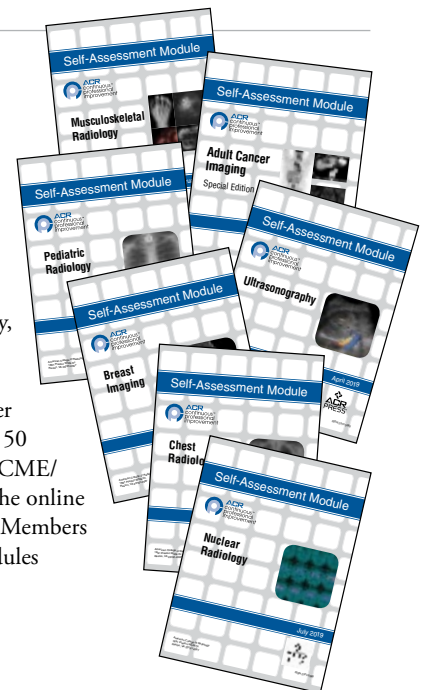
Now more than ever, leadership is for everyone. According to Keith E. Newbrough, MD, a radiologist with Sentara Healthcare in Norfolk, Va., “The content provided by the RLI, both in didactic and hands-on small group workshops, provides radiologists with a foundation in leadership training to help ensure quality, elevate service, and deliver improved patient care within our practices.” Here’s what’s coming up from the RLI. Visit [acr.org/RLI](http://acr.org/RLI) to learn more.

- Health Care Economics Milestones**  
 The RLI Health Care Economics Milestones program provides a unique, interactive experience for residents to gain knowledge of radiology healthcare economics while satisfying the ACGME systems-based practice competency requirement. Visit [acr.org/hcem](http://acr.org/hcem) for details about the program.
- RLI Leadership Summit**  
 The RLI Leadership Summit is the only leadership training program in radiology that brings the best business theories and research on how to improve your practices and departments. This year’s Summit is scheduled for Sept. 11–13 in Wellesley, Mass. Visit [acr.org/leadership-summit](http://acr.org/leadership-summit) for registration details.
- RLI Power Hour**  
 The RLI Power Hour features free bi-monthly webinars to provide radiologists at all career stages with valuable insights on leadership and healthcare topics. On Thursday, April 23, at 7 p.m. ET, Lawrence R. Muroff, MD, FACR, and Chuck Falci, BS, a senior practice manager with Zotec Partners, will share their stories on the topic of “Developing Younger Radiology Leaders: Succession Planning.” Register for this session and other topics at [acr.org/powerhour](http://acr.org/powerhour).
- Taking the Lead Podcast**  
 Every month, RLI’s Taking the Lead podcast ([learn more in the May 2020 issue](#)) explores the unique career journeys of radiology’s most influential leaders to provide practical insights into how to find success across a spectrum of clinical environments and organizations. Learn about the challenges that transformed these everyday radiologists into today’s leaders and how they continue to impact the field at [acr.org/rliipodcast](http://acr.org/rliipodcast).

## CPI Releases Seven New Modules

Under the leadership of Chair Harris L. Cohen, MD, FACR, the Continuous Professional Improvement (CPI) program successfully released seven new modules in 2019, including modules in Chest Radiology, Nuclear Radiology, US, Pediatric Radiology, Musculoskeletal Radiology, Breast Imaging, and a special edition module in Adult Cancer Imaging. Each CPI module includes at least 50 self-assessment questions and offers up to 8 CME/SA-CME. Choose the print publication or the online examination and receive a free e-book copy. Members save \$35 per module when selecting six modules through a customized CPI Select Six Series.

Learn more at [acr.org/cpi](http://acr.org/cpi).





# QPP: An Update on Performance Year 2

## Relatively little has changed for eligible professionals, according to the results from 2018.

Think about the last time you dictated a follow-up radiology report and nothing, or at least not much, had changed. You could almost copy and paste the old report, and the results would sound the same. This column seems to be that way for me, as I compare the recently released 2018 Quality Payment Program (QPP) results with those from 2017. While I cannot quite copy and paste 2017's results (which I described in my February 2019 column at [acr.org/QPP-Year1](http://acr.org/QPP-Year1)), relatively little has changed. Scores remain high, and bonuses remain low. Yet, there are some early trends worth highlighting (see table 1).

Most of the professionals captured by these performance numbers are physicians — but not all, as other professionals, such as podiatrists and dentists, are included. Collectively, this broad group is referred to as Eligible Professionals (EPs).

### MICRO-TREND 1: Overall performance remains quite high.

Performance scores increased from 89 in 2017 to 99.63 in 2018. As a result, the percentage of physicians in both the bonus pool and the exceptional performance pool increased to 84% in 2018, compared with 71% in 2017. At the same time, there were fewer physicians who received a negative adjustment — only 2%.

Going forward, by definition, EPs cannot do much better than 99.63 out of 100. Year 2018 was considered the second transitional year by CMS; therefore, 2018's scores may be a peak. Contributing to this could be other categories, such as Cost and Advancing Care Information, which will increase in weight and relative impact.

### MICRO-TREND 2: Bonus payments remain quite low.

Positive adjustments (or bonuses) remain low. The maximum bonus in 2018 decreased to 1.68% from 1.88% in 2017. In broad terms, the Merit-Based Incentive Payment System (MIPS) is a budget-neutral system in which penalties pay for bonuses. With only 2% of EPs receiving the maximal penalty of 5%, there simply is not much money to move to the bonus pool. The scaling factor adjusts bonuses, and when the scaling factor is less than 1, the bonuses become quite small.

Going forward, as scores lower and the performance threshold increases, more EPs may receive a penalty. This could yield greater positive adjustments for those who score favorably. If the scaling factor becomes greater than 1, bonus payments could reach double digits, which could be more motivating than the current modest bonus amounts.

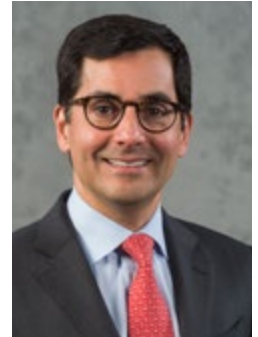
### MICRO-TREND 3: Small practices are doing better.

Large practices again did better than small practices, scoring 92 compared with 66 for small practices. But that gap narrowed by 72% compared with 2017. Contributing to this improvement were extra points and accommodations provided to small practices by the 2018 MIPS scoring rules, such as an additional 5 points onto the final score.

In the future, criticisms that the program is difficult for small practices remain, perhaps increasing consolidation to larger practices with greater resources. As small practices do better, this pressure may lessen. And as a result, small, independent practices will be able to not only survive but thrive.

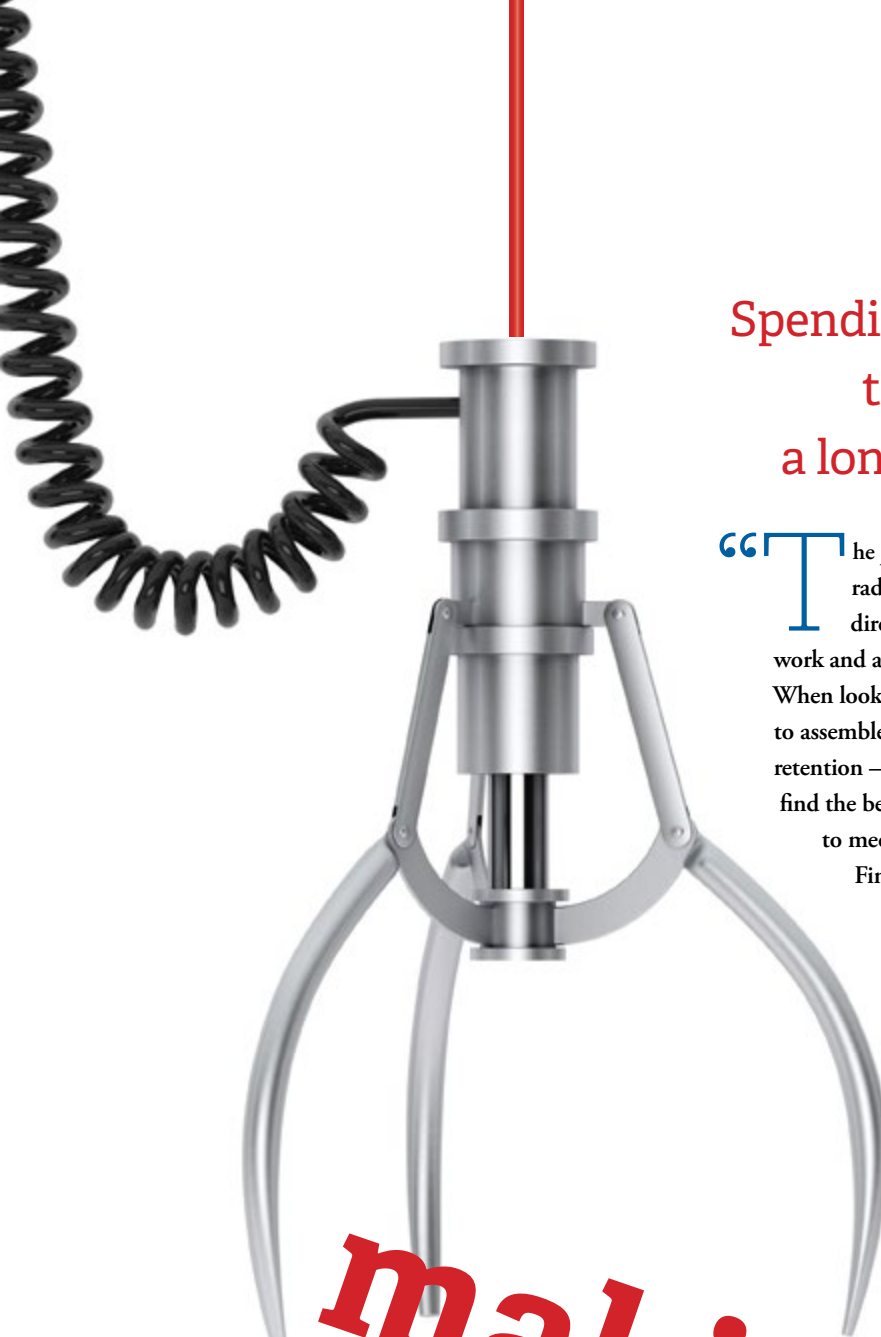
### MICRO-TREND 4: Physicians are moving from MIPS to APMs.

The number of EPs in MIPS decreased by 100,000, while the number in Advanced Alternative Payment Models (APMs), referred to as Qualifying APM Participants (QPs) — increased by 83,000. It is not entirely clear whether these are the same physicians moving from MIPS to APMs, but the absolute shift of 8–10% supports a positive trend in APM uptake. To maintain



	2017	2018
MIPS Participants	1MM	900,000
Max Bonus	1.88%	1.68%
QPs	100,000	183,000
Overall Median	89	99.63
Group Median	89	95
Individual Median	60	80
Large Practice Median	90	92
Small Practice Median	38	66
Large Versus Small Difference	52	26

continued on page 21



## Spending focused, front-end time with job candidates is a long-term investment.

“The job market right now is heavily in favor of candidates, not radiology groups,” says Jay R. Parikh, MD, FACR, medical director of the MD Anderson Cancer Center Breast Care Network and a member of the ACR Commission on Human Resources. When looking for new talent, he says, it behooves radiology leaders to assemble a multifaceted group of staff who focus on hiring and retention — to flesh out more than technical skills in candidates — to find the best fit for a practice’s current culture with the most potential to meet its future goals.

Financial compensation will always be a part of enticing new radiologists, Parikh says, “but there are many other factors you need to look at over and beyond that.” This is true for private practices of all sizes and large hospitals and academic models, he adds. When it comes to these non-salary factors, Parikh says, “there’s a lot of overlap in what candidates are looking for, and all radiology leaders will be considering many of the same things when bringing someone on board.” Picking the wrong candidate can have disastrous downstream consequences. The team you task with evaluating new recruits should be equipped and empowered to pick a winner.

# making the right choice

## Hiring Players

Ideally, your recruitment and retention team will be supported by leadership — allocating enough money and time — and populated with staff from different generations, experience levels, cultural backgrounds, and workplace responsibilities, says Claire E. Bender, MD, MPH, FACR, professor of radiology at Mayo Clinic in Rochester, Minn. “Your team should have a committed radiology leader,” she says, “but also a representative from administration or the human resources department if you have one — someone who has been with the practice or in the hospital department for a while who can explain the culture of the place.”

Someone from the business side of the group can explain why and how the practice is successful. An HR representative can explain benefits, FMLA, and part-time policies. They may also be useful in interpreting the candidates’ applications. “These employees are well-suited to spot red flags when talking to applicants and reviewing the material they present,” says Bender.

Your organization may have a diversity committee. If so, you should definitely seek their help during the hiring process, Bender suggests. “If an applicant comes in to an all-white group of interviewers, for instance, that might not be sending the right message, Bender adds. A person who lives in the area in which the candidate will live and work can illustrate what they may like about it. A community member might also know of potential volunteer or outreach opportunities of interest to the candidate.

“The people in your hiring group should be people with soft skills who are relatable and natural communicators,” Bender says. A first impression is important, and the commitment and goals of the practice’s leadership must be clear. Interviewers should be as transparent as possible when explaining future plans, including possible changes to the size, scope, or location of the radiology group, Bender says.

## Meeting Needs

Whether in private practice or an academic setting, candidates typically have most of the same questions, Parikh says. Employers will hear: What are my hours? Will I be on call? When and how often? What is the leave policy? Are there education, research, or community service opportunities? Employers should be prepared with a hard sell.

Selling them on your culture is key. “High turnover raises red flags for candidates,” Parikh says. “That is going to weaken your position when trying to hire the best people — if they sense something is wrong with the culture of your organization.”

Radiology leaders — and those in the know on the hiring team — should be forthcoming about what has worked well and where there have been challenges. It is critical to assure the candidate that disruptive issues are promptly addressed and that you are committed to moving forward to create the best possible culture for future members of the group.

Candidates may ask how a radiology group addresses burnout and whether wellness programs are in place. Studies suggest that burnout in radiology has escalated enough in recent years to compel leaders in the field to put mechanisms in place to address the issue.

Family leave and work-life balance are also top of mind for more junior candidates, regardless of gender. “We have a lot of male imagers come in and ask about parental leave,” says Parikh. “These are the kinds of things that make your radiology group more or less appealing.”

Diversity is increasingly important to many job-seeking radiologists. It can be difficult for a small practice just starting out to make diversity a priority, Parikh acknowledges. “They may simply want to hire whoever appears to be the best



## Finding the Perfect Fit

The ACR Career Center is the premier recruitment resource dedicated to connecting medical imaging professionals with more job postings than any other radiology-specific job board. Follow these recruiting tips from the ACR Career Center:

- Visit [acr.org/career](https://acr.org/career) to post your organization’s job opportunity
- Create a company profile with logo to stand out
- Dive into the CV bank to find potential candidates
- Itemize benefits such as paid time off or no “on call”
- Describe the quality of life in your area within your posting
- Update your organization’s website





## Leadership is for Everyone

The RLI delivers leadership programs that prepare radiologists for negotiations, team building, communications, finance, and other non-interpretative skills that you need to survive and thrive in today's healthcare environment. To learn more, visit [acr.org/RLI](http://acr.org/RLI).

## A Necessary Benefit



More and more practices and institutions offer wellness-related programs for physicians. For some candidates, a well-being program is an attractive and necessary benefit. These programs demonstrate an organization's commitment to the well-being of staff and perhaps indicate a culture that values areas critical to well-being, such as work-life integration, personalization, team building, and more.

Like these organizations, the ACR is also committed to well-being. The ACR Radiology Well-Being Program ([acr.org/WBI](http://acr.org/WBI)) allows members to access resources and even provides the opportunity to anonymously self-assess their level of burnout.

candidate on paper," he says. "But as you grow, it is essential to pay attention to your organization's culture to include diversity."

If you are not adding more diverse hires as your business expands, Parikh says, you might want to revamp your hiring team to avoid detractors such as unconscious bias. The more diverse you are, the more it helps your organization — and not just in hiring. You become more available to patients who may feel more comfortable seeing diversity in your staff.

## Looking Inward

Just as the hiring team should be prepared to evaluate the needs and concerns of candidates, leadership must value the process as a long-term investment — giving its team the time and resources needed to make the best match. "Radiology leadership needs to make a thorough hiring process a priority, even when it's the least convenient time to be thorough," says Darcy J. Wolfman, MD, clinical associate at Johns Hopkins University and a member of the ACR Commission on Human Resources.

"Sometimes you just need a body — anybody — because you're feeling overwhelmed with work," she says. "In the long-run, it makes sense to take a step back, take a deep breath, and figure out what you actually need." Radiology groups and new hires will benefit from a deeper dig.

Mention things you would like to see from the person filling the position — things that may not be in the official job description. "Sometimes groups are too focused on what they need in the moment," Wolfman says. "If they have an immediate need for someone to split their time between reading general and MSK, for example, but could also use someone who really understands MRI protocol, why not tell the candidate? That person might be really into that."

As important as finding out what the candidate might be interested in down the road is your truthfulness about the future direction of the practice. "You don't want to go through the whole hiring process again in a year when the new hire decides it isn't working out," Wolfman says.

She recalls an interview scenario in which the candidate accepted a position based on the understanding that she would be covering two community-based hospitals and two outpatient clinics. By the time she started the position, the employer was wrapping up a deal to cover a level-one trauma center — a move that was already in play during the candidate's interview.

"That meant there would be all sorts of things she didn't sign on for, like overnight and weekend shifts," Wolfman remembers. "When she learned that the deal was being negotiated during the hiring process, she felt betrayed and didn't stay long."

## Losing Futures

"The more time and effort you put into recruiting the right people on the front end, the more benefits you will reap longitudinally," Parikh says. "Not only are you bolstering the practice's reputation in terms of future hires, but there is huge cost in continuously recruiting. The costs of replacing a physician are estimated to be two to three times the physician's annual salary. That's a heavy hit for groups to take."<sup>1</sup>

The cost to a radiology group when someone leaves is more than dollars lost. "It disrupts workflow when someone leaves," Parikh says. "There's some acclimation that has to happen when new hires join a team. New radiologists must build trust and continuity with referring physicians and administrators. There's a lot of non-clinical, almost political, capital that develops the longer a radiologist stays on."

This comes back to how much time you are willing to invest on the front end when meeting candidates, Bender says. The process is long and expensive, but upfront costs for a new hire — staff time, multiple visits, travel expenses, and so on — will probably reduce turnover.

To save your radiology group time and money, look for candidates who have done

their homework, Wolfman says. “Regardless of whether the candidate is younger or mid-career, they need to be prepared with a checklist of what they are looking for — and that list needs to be prioritized,” she says.

Bender agrees, and stresses that the items on the checklist will likely be similar among candidates from different generations and with different levels of experience. Their priorities are the best indicator when determining who may work well with the radiology team, she says.

Wolfman also cautions about candidates who are adamant about never working for a certain type of radiology group. Someone who wants a guarantee that the way things are now is the way they will always be is not the flexible team player you want.

## Mentoring Growth

“A bad hire can erode the culture of the group,” says Juan J. Jimenez, MD, associate medical director of radiology at Carle Health System and clinical associate professor at Carle Illinois College of Medicine, who presented on the topic of recruitment with Bender at the 2020 ACR-RBMA Practice Leaders Forum in San Diego in January. “It amazes me how one vocal malcontent can impair an otherwise cohesive and collaborative group,” he says.

Although it is incumbent on the leadership of a radiology group to make the best picks through a thoughtful hiring process, the practice’s work doesn’t end there, Jimenez suggests. New hires need to continue to feel engaged once they are on the job.

“If your group is large enough, get new hires out into the organization to serve on committees and to represent their department,” Jimenez says. “A private group with a hospital contract may have more difficulty establishing these kinds of connections, but making an effort is vital to the group’s continued success.”

Let your newer hires know about educational and other academic activities, Bender says. “Money in medicine is not the great motivator. They want to know about things like research time and mentorship programs,” she says. Younger generations are often interested in learning from more experienced radiologists, and they look for a fair path to leadership positions.

“Some of the younger hires are very service-oriented. They want to get involved with community outreach efforts an institution sponsors,” Bender says. They want to work with a purpose and have time for career development and training — including outside events and seminars, she adds. Retaining new hires hinges on getting them excited, making their job feel meaningful, and putting future goals in reach.

The hiring process can take up to a year or more for some organizations. Making the wrong recruiting decisions means lost time, wasted money, and added pressure on radiology teams to fill gaps. “When you have people who are overworked or burned out, they leave,” Bender says. “Or maybe worse, they stay and the quality of their work suffers.”

Patients deserve access to the best radiologists. “Hiring the right person will cost,” Bender says. “But it will cost less later if it’s done right now.” **B**

By Chad Hudnall, senior writer, ACR Press

### ENDNOTE

1. Shanafelt TD, Noseworthy JH. Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout. *Mayo Clin Proc.* 2017; 92(1):129–146.



**“The more time and effort you put into recruiting the right people on the front end, the more benefits you will reap longitudinally.”**

**—Jay R. Parikh, MD, FACR**

# Improving Quality Through Collaboration

By working together, radiologists and RTs at one radiology department are taking control of their own quality and safety program.

By Miranda Mares, MS, RT(R)(QM), a radiology quality analyst at the University of New Mexico Hospital's radiology department



Pictured are members of the University of New Mexico's Radiology Quality Steering Committee: (L-R) Miranda Mares, MS, RT(R)(QM), radiology quality analyst, Meaghan Eiland, RN, DNP, executive director, Steve C. Eberhardt, MD, vice chair of clinical operations, Reed G. Selwyn, PhD, chief of medical physics and vice chair for informatics, William G. Schaeffer, MD, vice chair of quality and safety, and Chandra Gerrard, MPH, RT(R)(MR)(CT)(QM), manager of clinical imaging systems

As the American Society of Radiologic Technologists' 100th anniversary approaches, the *Bulletin* is providing a forum for RTs going above and beyond for their patients and colleagues.

## Recognizing the Need for a Quality Program

As the quality analyst for radiology at the University of New Mexico Hospital, closing the communication gap between RTs and radiologists is one of my key focus areas. Silos inhibit our ability to provide the best patient care, image quality, reporting, data analysis, and overall quality within the department. Of course, breaking down silos is not up to just one person. To help improve quality across the department, it is important to have the support of the entire leadership team. To accomplish this, we decided to build a comprehensive and inclusive quality and safety program. Several quality and safety teams within the radiology department support our efforts, including the MRI Safety Committee, the Quality and Safety Steering Committee, and the Quality and Safety Leadership Team. Each of these groups consists of RTs, registered nurses, radiologists, medical physicists, and imaging informatics specialists.

## Growing Our Own

To create a quality and safety program, we needed a mission and principles to guide us. Two years ago, the Quality and Safety Steering Committee held its first annual radiology quality retreat — where we left campus to discuss which areas within radiology needed work. Our quality and safety program is now based on four principles: competence, evaluation, responsibility, and valuing quality and safety. Guided by these key principles, our goal is to ensure that all members of the radiology team understand their job functions, daily tasks, departmental policies and procedures, processes for problem-solving, and the importance of accurate and timely communication. This ensures that everyone has the tools and knowledge necessary to create an environment where quality and safety can grow. To continuously improve, we set realistic goals and identify and monitor quality and safety metrics to regularly evaluate our progress. By doing this, we can better understand trends, predict outcomes, and make data-driven decisions. A few of our monitoring tools include internal audits and inspections, simulations and drills, and observations. Additionally, it is critical that everyone takes personal ownership — including taking responsibility for system-wide issues and participating in correcting them, regardless of potential personal consequences.

## Expanding From Improvement

Last year, we began to expand into quality subcommittees specific to each modality. We created the CT department's "quality triad:" a radiologist section head, a lead physicist, and a group of lead RTs. During these meetings, we discussed image quality trends, protocol issues, dose monitoring trends, and current and future RT-led quality improvement projects specific to CT. These sub-groups invite frontline staff discussion and inclusion in our quality program — and provide radiologists and RTs with a non-confrontational environment where they can voice quality concerns, share ideas, and become more involved and aware of the quality improvement happening within their section.

After piloting this quality subcommittee for a year, we saw an overall improvement in team understanding between radiologists and RTs over the type of quality initiatives taking place, how quality initiatives help provide optimal patient care, and how radiology departments successfully complete a quality improvement project. Moving forward, we plan to implement quality subcommittees for other modalities in addition to CT.

## Becoming Part of the Team

In our university hospital, we have 31 radiology residents on the team. Learning about quality and doing quality

*continued on page 21*



# The Latest on the NRC's 10 CFR 35 Evaluation

## How is the ACR responding to an NRC evaluation of the training and experience requirements for authorized users of certain diagnostic and therapeutic agents?

In 2019, my colleagues and I reported on the activities of the ACR Commission on Government Relations' Federal Regulatory Committee Workgroup, tasked with responding to an evaluation by the Nuclear Regulatory Commission (NRC) of the authorized user training and experience (AU T&E) requirements for certain therapeutic radiopharmaceuticals.<sup>1</sup> The workgroup had developed comment submissions in consultation with like-minded stakeholder organizations and met with NRC staff and commissioners in support of the College's position. This article will update readers on more recent activities.

On Jan. 17, 2020, the NRC released staff recommendations (SECY-20-0005, Rulemaking Plan for Training and Experience Requirements for Unsealed Byproduct Material) to the agency's commissioners, following a multi-year evaluation of the AU T&E requirements. The evaluation was spurred by advocacy from drug manufacturers and affiliated individuals seeking reduced AU T&E requirements for their products. In the public meetings and comment opportunities leading up to SECY-20-0005, the discourse focused exclusively on the AU T&E requirements in 10 CFR 35.390 for certain unsealed material requiring a written directive (i.e., radiopharmaceutical therapies). However, SECY-20-0005 unexpectedly expanded the focus to also include most diagnostic uses of unsealed material under §35.190 and §35.290 — as well as other therapeutic uses of radiopharmaceuticals involving sodium iodide I-131 (§35.392 and §35.394) and parenteral administrations of unsealed material requiring a written directive (§35.396).<sup>2</sup>

Specifically, SECY-20-0005 recommended eliminating AU T&E requirements for diagnostic and therapeutic uses of unsealed materials. Physicians would only be AU-eligible if they have NRC-recognized board certification. While board certification is currently the primary pathway to AU eligibility, SECY-20-0005 recommended the creation of new board recognition criteria intended to be more inclusive of non-radiological subspecialty boards.

AUs of unsealed materials would no longer be identified on NRC or agreement state licenses, and AU T&E documentation would no longer be filed with NRC or agreement state agencies for review. Instead, licensed facilities would be responsible for demonstrating their affiliated AUs have appropriate board certifications during NRC or agreement state inspections. For reasons unexplained in SECY-20-0005, all medical uses that involve sealed sources — such as manual brachytherapy and radiation therapy modalities — would be excluded from the recommended changes and, hence, multi-modality licensees would need to comply with disparate physician authorization, documentation, and inspection paradigms.<sup>3</sup>

Moving forward, the commissioners will need to consider SECY-20-0005 and approve or reject the NRC staff recommendations. Any subsequent rulemaking activities would likely take the NRC years to complete and several years longer for agreement states to adopt compatible regulations.

In cooperation with like-minded stakeholders, the workgroup will continue its outreach to the NRC to promote policies that protect public safety and quality of care and will continue to inform ACR members of its activities. As has been stated previously, unfettered patient access to diagnostic and therapeutic agents by current AUs is critical to support of the Workgroup's activities. **B**

Paul E. Wallner, DO, FACR, is senior vice president of 21st Century Oncology, Inc., and chair of the ACR Commission on Government Relations' Federal Regulatory Committee T&E Workgroup.

*Dr. Wallner has no conflict of interest regarding the subject of the article.*

### ENDNOTE

Full list of references available in the digital edition at [ACR.org/Bulletin](https://www.acr.org/Bulletin)

### What You Need to Know

- NRC staff recommended AU eligibility changes that would remove T&E requirements, and instead rely fully on NRC-recognized board certifications.
- Board recognition by NRC would be based on new, currently unspecified criteria intended to be inclusive of specialties without radiation and nuclear materials expertise.
- Depending on implementation, this concept could introduce radiation safety concerns for patients, healthcare personnel, and the public.
- NRC's leadership plan to vote on this in 2020, and if they approve, any subsequent regulatory changes will take years to come to fruition.

# Expanding Global Health

The 2019 ACR Goldberg-Reeder awardees worked with local physicians and patients to advance radiological care in Tanzania and Uganda.



Justin Ruey Tse, MD, attends a readout of MSK cases with Zenon Protopapas, MD, a radiologist with West Haven VA Medical Center (far left) and several Muhimbili National Hospital residents.



Justin Ruey Tse, MD, works with the junior residents at Muhimbili National Hospital to interpret an abdominal CT.

The ACR Foundation's Goldberg-Reeder Travel Grant Program facilitates knowledge sharing while assisting patients in low- and middle-income countries.

The latest group of award recipients brought their skills, expertise, and energy to Uganda and Tanzania, where they worked with local colleagues and patients to advance radiological care. Fresh from their travels, the recipients shared their insights and experiences with the *Bulletin*.

## Justin Ruey Tse, MD TANZANIA

When Justin Ruey Tse, MD, a radiology resident at Stanford, returned to Dar es Salaam, Tanzania, it was like he had never left. His trip marked the second time he practiced at the Muhimbili National Hospital — the largest and oldest in Dar es Salaam. As a returning resident, he already had working relationships with many of the local residents and an understanding of the improvisation necessary in this environment.

On this second visit, Tse immediately noticed opportunities for care improvement. As he observed practices around the hospital's MRI scanner, he found that the hospital did not have an MRI safety protocol. The hospital had already experienced two sentinel events, and Tse wanted to prevent additional ones.

“We observed unscreened patients’ family members going in and out of the magnet room or saw the magnet room was left open,” says Tse. “People could end up seriously injured if the proper precautions are not taken. So a goal that came out of the trip was to propose a detailed safety protocol to the engineering team that ensured that the doors to the room stayed closed, proper preparations were taken before a patient entered, patient and family members were supervised by hospital personnel, and the safety of the staff and patients remained top of mind.”

Tse found that another issue with the MRI and medical equipment was that all the posted signs and instructions were in English or French — even though the native language of the region is Swahili. Tse worked to redesign the signage and instructions so that everything was culturally specific, in Swahili, and understandable to patients with limited health literacy.

Tse notes that one of the central goals of his trip was to educate and provide substantive training — versus just lending a hand in day-to-day imaging. This distinction is critically important, says Tse. “We are not there to do radiology,” he says. “They have radiologists there, although not nearly enough to serve the population.<sup>1</sup>

We are there to help improve local practices by teaching their junior residents and providing the specialized training in abdominal, brain, musculoskeletal, and breast imaging they may not otherwise get in Tanzania.”

According to Tse, Muhimbili National Hospital often sees the most complex and rare cases. Since many of the images the radiologists see in the hospital are of metastatic cancers of the liver and kidneys, this specialized training helps to improve care and deepen the understanding of different treatment strategies.

On his second trip to Tanzania, Tse aimed to make a lasting impact based on the needs of the community. “Some needs are easier to anticipate than others,” says Tse. “You just have to be ready to listen, observe, and get feedback on what worked and what didn't — and then you get to see that the impact you made was sustainable.”



## Trent P. Dittmer, MD UGANDA

For Trent P. Dittmer, MD, a third-year resident at the Medical University of South Carolina (MUSC), mornings in Uganda involved doing rounds at the Masindi-Kitara Medical Center (MKMC). Dittmer often alternated between the adult, pediatric, and maternal wards reviewing patients' medical treatments and advising on what imaging studies might be useful in each unique case. After rounds, Dittmer would spend the rest of the day in the sonography suite performing exams for a variety of medical complaints with a slew of cases focused on fetal well-being.

"Our goal was to build on the sonographic and radiographic techniques used by the medical team at MKMC," says Dittmer. "For the first time in my young radiology career, I found I was hands-on with the US probe."

For months leading up to his trip to Uganda, Dittmer had planned meticulously. But, as in all adventures, there were factors he could not predict — the biggest of all being the X-ray image processor malfunctioning. This meant he could not actually acquire images from MKMC to interpret during his time in Uganda. "We did manage to get images from a private practice in Masindi and did our best to roll with the punches," says Dittmer. "There is always an element of unpredictability inherent in overseas travel."

During his time at MKMC, Dittmer met a wide variety of patients, from a young man suffering from head trauma after a motorcycle accident to a pediatric patient with sickle-cell disease. "I saw a man infected with thyroglossal duct cyst as well as numerous cases of malaria, tuberculosis, and preeclampsia," says Dittmer. "I was amazed daily by the complexity of cases at MKMC." With assistance from his accompanying mentor, Maria G. Matheus, MD, an oncologist from MUSC, he was able to weave through intense days and grow his own understanding of the impact radiology can have.

Dittmer has found many ways to bring what he learned at MKMC back to his approach to care in the U.S. "I left Uganda with a better understanding of what it means to practice frugally while delivering the highest level of healthcare," he says. He also acknowledges the challenges for patients and physicians in developing countries. "Global health needs to be expanded upon," he points out. "We want to make it sustainable for those who come after us and come up with a curriculum that works after we are gone." **B**

By Ivana Rihter, freelance writer, ACR Press

### ENDNOTE:

1. Goldberg J. Tanzania country profile. RAD-AID.org. Published June 2017. Accessed March 10, 2020.



▲ Trent P. Dittmer, MD, (back row, fourth from right) is pictured with the entire team of doctors, nurses, physician assistants, administrative staff, and laboratory technicians at MKMC.

◀ (L-R) Zak, a sonographer at MKMC, Maria G. Matheus, MD, an oncologist from MUSC, and Trent P. Dittmer, MD, are pictured after a presentation on chest radiographs.

## Where will your travels take you?

Did you know that the ACR Foundation's Goldberg-Reeder Resident Travel Grant awards grants each year to qualified residents and fellows seeking to spend at least one month assisting healthcare in a developing country? Learn more and apply by June 30 at [acr.org/Goldberg-Reeder](https://www.acr.org/Goldberg-Reeder).



# Providing Clarity on Breast Density

## Mayo Clinic radiologists educate patients about breast density and supplemental screening options — empowering women to make informed imaging decisions.

Each year, Arizona resident Michelle Ochenkoski dreads scheduling her annual mammogram. Ochenkoski is among the 50% of all women who have dense breast tissue, which can mask tumors on a mammogram and can also increase a woman's risk of developing breast cancer. Recognizing these factors, Arizona legislators approved a mandate in 2014 that requires healthcare providers to notify patients, like Ochenkoski, whose mammography results indicate that they have dense breast tissue.

The only problem was that Ochenkoski, like many women, didn't understand what the notification meant, so she just tucked it away in her medical file with everything else. But after Ochenkoski's mammogram this year, her primary care physician (PCP) asked if she'd like to visit the new dense breast consultation clinic at the Mayo Clinic in Arizona to speak to a radiologist about the implications of dense breast tissue and explore additional screening options. Ochenkoski eagerly agreed.

### Identifying the Gap

After Arizona and several other states mandated that healthcare providers send notifications to patients who have dense breasts, President Donald J. Trump signed a similar directive into federal law in February of 2019. The notifications encourage patients with dense breast tissue to discuss additional screening options with their physicians — typically PCPs, OB/GYNs, and internists — who don't always have the imaging expertise needed to explain the tests. As a result, referring physicians like Jewel M. Kling, MD, MPH, associate professor of medicine and associate chair for research in women's health internal medicine at the Mayo Clinic in Arizona, frequently called Victor J. Pizzitola, MD, MPH, division chair of breast imaging at Mayo, to ask him how to respond to patients' questions about supplemental screening. He didn't have an immediate solution for streamlining the process — but a few years later, when fourth-year resident Kristin A. Robinson, MD, asked how she could get more involved in patient care during her breast imaging fellowship, it suddenly clicked.

As Pizzitola and Robinson brainstormed ideas, they realized that a dense breast consultation clinic could be the perfect opportunity for radiologists to add value.

### Making a Case for Consultation

Early in the planning process, Pizzitola identified the top five mammography referrers at the Mayo Clinic in Arizona and asked them what they thought of the idea. Their immediate reaction was relief. "Opening that dialogue with our referring providers was critical because it helped us understand how ill-equipped they were to discuss breast density with patients," Pizzitola says. To convince administrators of the idea's potential, Pizzitola diagrammed the clinic's workflow, from ordering to billing. He reached out to a breast imaging colleague at another Mayo Clinic location who had experience with billable evaluation and management consultations. This colleague explained how radiologists could perform, chart, and bill for consultations, and how referring physicians could order them through the EMR. Pizzitola and Robinson used this information to create a business plan with a financial impact analysis. Pizzitola and Robinson proposed a pilot phase for the project and designed an Internal Review Board (IRB) survey to collect feedback from patients to measure the clinic's effectiveness throughout this phase. As the logistics came together, the proposal for the consultation clinic slowly gained administrators' support.

**"We collaborated with referring providers to translate our imaging expertise surrounding breast density and available adjunct examinations into an understandable level that could be easily dispensed to patients."**

—Victor J. Pizzitola, MD, MPH

### Finding Space and Time

From there, Robinson and Pizzitola worked with Mayo's IT department to build an electronic interface in the EMR that would allow clinicians to order the consultations. They also spoke directly with referring physicians to develop the clinic's workflow, including when and where to consult with patients. Together, they decided that a referrer



### Breast Cancer Screening

The ACR, the Society of Breast Imaging, and the National Comprehensive Cancer Network, recommend that all women have yearly mammograms beginning at age 40. Women at high risk may benefit from starting earlier. For more information on breast cancer screening, visit [EndTheConfusion.org](http://EndTheConfusion.org) or [RadiologyInfo.org](http://RadiologyInfo.org).

could order a consultation any time after a woman with dense breast tissue has a normal screening mammogram and that the consultation would occur as a separate visit.

Since the breast imaging department didn't have the bandwidth to staff the clinic every day, Robinson and Pizzitola began scheduling appointments for a few hours at a time, before dedicating a full day or two per week. This required support from the rest of the radiology staff, who had to cover Pizzitola and Robinson's time away from reading mammograms.

## Educating Patients

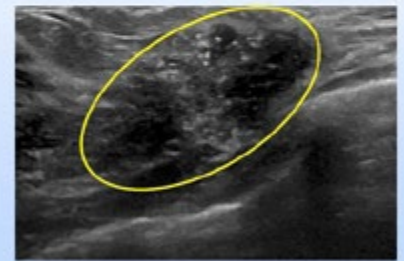
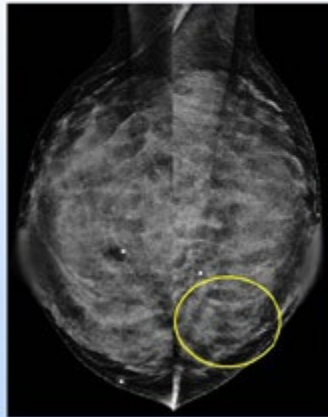
With the guidance and approval of women's health providers, Robinson developed a slideshow presentation to share with patients during the consultations. "As breast radiologists, we have little experience with formal clinical consultations," Pizzitola says. "We collaborated with referring providers to translate our imaging expertise surrounding breast density and available adjunct examinations into an understandable level that could be easily dispensed to patients." The presentation explains the four categories of breast density and illustrates how dense tissue and cancer appear in various types of imaging. These visual aids guide the discussion between radiologists and patients about supplemental screening options — such as whole-breast US, contrast-enhanced MRI, molecular breast imaging (MBI), and contrast-enhanced mammography — while addressing common concerns, such as radiation dosage and costs that may not be covered by insurance. At the end of the consultation, if the patient decides to pursue a secondary exam, the radiologist can immediately schedule it while charting the visit — copying the referring physicians in the EMR so that they receive notifications about the order and the results. Alternatively, if the patient requests more time to consider the next steps, the radiologist simply notes which options they discussed to keep the referring physician apprised.

## Expanding the Reach

Within six weeks after launching the program with five referring physicians, Pizzitola opened it up to the rest of the Mayo Clinic in Arizona. Once the clinic opened to general practitioners beyond women's health, the appointment schedule filled quickly. As Robinson's fellowship drew to a close, the clinic needed additional resources to meet the increasing demand. Pizzitola asked the department's other breast imaging subspecialists to get involved, and they began shadowing Robinson to observe the flow of the conversations and the logistics of charting the consultations in the EMR. After Robinson moved to Mayo Clinic's Florida location for a staff breast imaging position, Pizzitola also engaged the new breast imaging fellow who took her place. Now, the fellow and

## Why is breast density important?

- Increased risk of breast cancer
- Cancer is less visible on mammograms



Larger cancer in extremely dense tissue

the three dedicated breast imagers rotate clinic hours to offer appointments six or seven days a month. They schedule consultations in one-hour time slots, but most conversations last between 30–45 minutes. On average, the clinic sees six to eight patients per day — totaling about 40–50 each month.

## Producing Results

The pilot phase and IRB portion of the program won't conclude until 200 patients have visited the clinic and sufficient data has been collected. Pizzitola plans to publish the survey results and present the data at The Society of Breast Imaging meeting next spring. As of mid-September of 2019, the clinic had seen 140 patients. Of those, 104 patients completed IRB surveys before and after their visits, revealing significant early results. About 89% of patients said they were very satisfied with the consultation experience, and 92% agreed that they left with the knowledge to make an informed decision about their supplemental screening options. In total, consulting radiologists recommended some type of supplemental screening to 101 patients, and 71 of those exams have been performed so far. These secondary exams have not yet detected any additional cancers. The Dense Breast Consultation Clinic also gives radiologists a more direct role in interacting with patients. By taking the time to educate patients, radiologists in the dense breast consultation clinic are promoting the importance of imaging. "I finally have an answer instead of fearing the worst," Ochenkoski says. "I now consider the radiologist part of my care team, and I think that's a missing link in women's care." **B**

The Mayo Clinic in Arizona established a dense breast consultation clinic in February of 2019 to help patients understand the cancer risk associated with dense breast tissue.

By Brooke Bilyj, freelance writer, ACR Press

# False Buzz

## The argument that AI will soon replace radiologists is trendy, but it doesn't hold up under scrutiny — AI will enhance the value we provide to patients, not replace us.

In January, *Nature* published an article about an AI model that could match or outperform radiologists at detecting breast cancer. The article was widely covered in the press, adding to the many studies demonstrating the potential benefits of AI in medical imaging. Developed by Google's health research unit, the model was trained on thousands of images from both the U.K. and U.S. In both cohorts, AI found cancers initially missed by radiologists, and it reduced false positives for patients with no cancer. At the same time, there were some cancers found by radiologists that were not identified by AI. Of note, the study did not include all available modalities, including digital breast tomosynthesis.

The article's authors acknowledge that real-world testing will be needed to ensure the model can be generalized to routine practice. In an editorial about the paper ([bit.ly/BCS\\_AI](https://bit.ly/BCS_AI)), ACR Chief Research Officer Etta D. Pisano, MD, FACR, wrote, "The real world is more complicated and potentially more diverse than the type of controlled research environment reported in this study."

Impressive studies like this one seem to add one more brick to the house some are building around the idea that AI is outperforming doctors — and that radiologists will be among the first to be replaced. So what should we believe? In an article published in the *JACR*<sup>®</sup> in January ([bit.ly/JACRFeb2020\\_AI](https://bit.ly/JACRFeb2020_AI)), we took a closer look at some of the claims we hear repeatedly that suggest a disruption of the field of radiology is imminent, and we made some more realistic predictions about the future as AI in healthcare improves.

### Claim #1:

**Algorithms are highly accurate — making autonomous radiological care by machines mere moments away.**

We may in fact overestimate our own brilliance, but that's not what is behind radiologists asserting AI shouldn't provide autonomous care. Most radiologists are enthusiastic about algorithms that are able to detect subtle findings radiologists might miss. These narrow AI tasks are ideal uses of AI and can potentially benefit

patient care. And we are not expecting perfection. Radiologists themselves do not perform identically on every task, and we would not expect it of AI. The combination of AI recognizing abnormalities not caught by radiologists and radiologists catching abnormalities not detected by AI is a powerful one with great potential for patient care.

The fundamental flaw in asserting that AI will replace radiologists is based on the belief that AI algorithms can be rapidly developed for the thousands of tasks radiologists perform. While AI has been shown to augment the care radiologists provide, AI does not yet have the capacity to do what radiologists accomplish every day. We read about the things AI can do; we don't read about the things it cannot do — because that's not news. How long will it take for developers to create all of the algorithms necessary for things like fracture classification and every post-traumatic abnormality in every bone and joint? No one knows, but don't look for it any time soon.

### Claim #2:

**Getting AI results will be like ordering lab tests.**

Look closely at the examples offered by those who explain how AI can substitute for radiologists, and you'll see that radiological interpretation is portrayed as a binary activity with a yes/no output. That's true of lab work, but image interpretation and characterization of radiological findings are rarely binary.

Let's look at pneumonia as an example. The question for a radiologist interpreting an image is not simply, "Is there pneumonia or not?" For an algorithm to be useful, it would need to go beyond "pneumonia or no pneumonia" and tell us whether there was expansion or atelectasis, whether there was a pneumothorax, whether there was a pleural effusion, or whether there was an empyema, lung abscess, or neither. Nothing we have seen to date points to an algorithm with the ability to look at all of these factors and reach a conclusion. When you see examples of AI in an article and are led to believe they could substitute for a physician or radiologist, take a hard look at what task the AI is performing and ask yourself whether or not interpretation is required.

### Claim #3:

**The FDA has already begun clearing algorithms, so AI that provides unsupervised automated analysis will soon be brought to market.**

To date, none of the 40 or so FDA-cleared AI radiology algorithms provide any level of autonomous care. The most common form these algorithms take is triaging work lists based on potential critical findings of the AI.

Unless there are significant changes in the regulatory process, autonomous care by software as a medical device



would almost undoubtedly require Class III classification with full FDA approval. This would require multicenter trials, the cost of which would be astronomical when amplified by the thousands of algorithms that would require approval. Not only would this be cost prohibitive for small AI developers, it would put tremendous pressure on FDA resources.

### Where does that leave us?

While predicting future workforce needs is always challenging, dire predictions for the specialty shouldn't go unchallenged. As a technologically savvy group, the future seems incredibly bright for our specialty. Those who believe there will be dramatic workforce reductions seem to suggest it will happen all at once. These claims can be misleading. Changes to the radiology profession from AI are inevitable, but they will be gradual. **B**

Bibb Allen Jr., MD, FACR, is ACR DSI's chief medical officer and a diagnostic radiologist at Grandview Medical Center in Birmingham, Ala.

## QPP: An Update on Performance Year 2

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this trend, CMS will need to increase its APM offerings, particularly to specialists. The availability of an adequate number of measures under MIPS remains problematic and may necessitate a greater move to APMs.<sup>1</sup>

In conclusion, physicians should be pleased with their high scores. The optics of scoring 100 are undoubtedly favorable. But the small bonuses are only a marginal reward for this effort. The return on investment is not obvious. The movement of EPs from MIPS to APMs is slow but increasing. New programs, such as the MIPS Value Pathways, may provide additional options for all EPs. Looking ahead, EPs should not assume that the same amount of effort as that in 2018 will suffice. **B**

#### ENDNOTE

1. Golding LP, Nicola GN, Duszak R, Rosenkrantz AB. The Quality Measure Crunch: How CMS Topped Out Scoring and Removal Policies Disproportionately Disadvantage Radiologists. *J Am Coll Radiol*. 2020; 17(1): 110–117.

## Improving Quality Through Collaboration

*continued from page 14*

improvement projects within our radiology department is part of their curriculum. Historically, our radiology residents completed these projects by working with fellow residents and radiologists. The RTs and other clinical staff rarely knew what kind of projects were being done or what outcomes and improvements came from these projects. We identified this situation as another area where we could improve RT and radiologist collaboration and further align our mission of improving quality with the people who are learning and growing as part of our team.

Working with our radiology residency program director, we began to break down the silos by attending resident conferences and talking about our quality program, successful project implementations, current projects, and how residents can participate. Moving

forward, we plan to use the Quality and Safety Steering Committee meeting as a venue for residents to bring their ideas for their own quality improvement projects. This will allow us to provide the tools, resources, and support they may need to complete their projects. Once their final projects are completed, our residents will present them to the Quality and Safety Committee. This will prepare them to incorporate quality improvement into their future careers and foster a multidisciplinary approach to quality-based patient care.

By creating a culture that empowers our radiologists and RTs to speak up, work together, and take control of their department's own quality and safety processes, we have seen great improvements in error reduction, self-reporting, and overall ownership of quality and safety. The dedication and empathy of our entire team motivates each one of us to make our hospital a place where we can be proud to work — and proud to take care of our community. **B**

## JOB LISTINGS



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**Michigan** — Lansing Radiology Associates (LRA), a well-established, successful mid-Michigan hospital-based radiology practice, is seeking a neuroradiologist with fellowship training and a general radiologist. LRA is offering \$50,000 signing bonuses and a one-year partnership path. The first year compensation will be based on a generous percentage of shareholder compensation.

**Contact:** Email [amanda@LRArads.com](mailto:amanda@LRArads.com) or call 517-364-2315.

**Mississippi** — A full-time general diagnostic radiologist position with a 1–2 year partnership track is open in Meridian. The position offers a competitive salary/benefits package during the partnership track period, with potential for sign-on bonus/stipend. The position includes nighthawk coverage from 10 p.m. to 7 a.m. every day of the week. Mammography experience/interest and/or mammography fellowship training is a plus, but not required. The ability to do light procedures is a plus, but not required.

**Contact:** Email [wgw@meridianimaging-pa.com](mailto:wgw@meridianimaging-pa.com).

**Delaware** — Christiana Care is looking to hire a full-time radiologist to focus on mammography and breast imaging with no call requirements.

**Contact:** Contact Lauren Mahaney at [lauren.a.mahaney@christianacare.org](mailto:lauren.a.mahaney@christianacare.org) to learn more.

**Pennsylvania** — A hospital-based private practice is seeking a full-time diagnostic radiologist. The position offers a \$50,000 bonus with three-year commitment, competitive salary, and benefits. The ideal candidate is comfortable in a fast-paced environment reading X-rays, CT, MRI, US, fluoroscopy, and nuclear medicine. The position is located in northeastern Pennsylvania, two hours from Philadelphia and New York.

**Contact:** Send resumes to [resumes@raww.com](mailto:resumes@raww.com).

# What are the biggest issues for graduating trainees entering the workforce and junior radiologists early in their career?



**“While we currently enjoy a strong job market, we face long-term economic challenges: Young radiologists may be disproportionately affected by declining reimbursements, commoditization, and portability of radiological services; competition with AI; and the uncertainty of rampant corporatization.”**

— Jesse Chen, MD, chief radiology resident at Staten Island University Hospital



**“Radiology has always been an innovating and evolving field. However, given the ongoing changes in the ‘business’ of radiology, graduating trainees must grapple with how they will define and safeguard their careers in this changing landscape. Everyone has their priorities when looking for a job, whether it be location, compensation, practice setting, or work composition.”**

— Kirti Magudia, MD, PhD, clinical/research fellow in the department of radiology and biomedical imaging at the University of California, San Francisco

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