Educating Radiology Residents About Patient- and Family-Centered Care: The Time Has Come

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INTRODUCTION

Patient- and family-centered care (PFCC) has gained increased attention in recent years, especially with the current focus on value over volume and improving the patient experience, but it is not a new concept in medicine or radiology. After a recent New York Times article highlighted how a radiology department failed to provide a radiologist's husband timely results [1], it is more critical than ever that radiology practices determine how to better care for their patients. Patients need radiologists to help navigate the technological maze of care. Although technology has revolutionized health care, demonstrating increased diagnostic certainty and streamlined workflows, it has had an untoward effect of weakening the physicianpatient relationship. It has become increasingly clear that radiologists should no longer hide in the dark [2]. If we argue that radiologists cannot hide from patients, then what about trainees? Trainees must develop the necessary skills to successfully navigate the evolving patient-centered landscape.

Accordingly, the ACR recently introduced the Commission on Patient- and Family-Centered Care [3,4]. PFCC is a key component to

providing value in health care and improving patient outcomes, and the education of future radiologists should adequately prepare them to flourish in this new paradigm

COMMUNICATION EDUCATION IN RADIOLOGY

Central to PFCC are interpersonal and communication skills, which have been identified by the ACGME as one of the six general competencies and as two essential radiology milestones [5,6]. In 2009, these competencies became mandated for training programs, and in 2013, the diagnostic radiology milestones were adopted. The milestones were formed from the existing competencies, drilling down into more specific targets of development as residents progress from junior to senior status [5]. One milestone focuses primarily on communication with patients and families, an essential component of providing high-quality care [6]. However, no specific guidelines or curriculum is provided to program directors on how to educate and evaluate their residents in this subject. Many programs blindly evaluate residents on these milestones on the basis of anecdotes from attending faculty members. Clearly, this does

not demonstrate an accurate assessment of a resident's milestone development in communication. Formal training in interpersonal and communication skills, however, provides an opportunity for each resident to develop skills, improve weaknesses, and practice strengths. This robustly meets the ACGME requirements, and training in these areas fulfills the goals of the ACR Commission on Patient- and Family-Centered Care.

The radiology literature has discussed the need for education in communication during residency. Bazzocchi [7] cited sources explaining that many radiologists feel that they have not been trained in communication, yet many are interested in this training. Additionally, when placed in a situation in which communication is critical, many radiology residents feel uncomfortable, resulting in stress and even the possibility of eventual burnout [7]. In breast imaging, in which understanding patient-provider communication needs is extremely important, few radiologists have received training, yet there is a desire to learn and improve. And though few data outline the required skills, training and assessment resulted in improved communication skills [8-10]. Moreover, breaking bad news to patients is

a task that spans subspecialties, though most residents and radiologists have not received training to confidently communicate results [11,12]. Furthermore, the informed consent process could be improved with education on effective communication [13]. Finally, lack of communication and professionalism spurred one institution to develop a department-wide program that emphasized the importance of those areas [14].

Several studies have also confirmed that training in communication increases the comfort level of trainees as they communicate with patients, positively changes a resident's approach to patients, and has a long-lasting effect on communication skills [15-17]. Interactive training, such as simulation or smallgroup learning, has been effective in enhancing radiology residents' communication and interpersonal skills [16]. Exposing radiology residents to patient experiences in a small-group setting has also been shown to positively influence resident attitudes toward patientcentered care in radiology [18]. Although not commonly offered, existing training opportunities include an innovative program to enhance radiologists' relational and communication skills (PERCS-Radiology) [19], a resident exercise that uses actors to simulate real-life communication scenarios [16], and a reflective, case-based, small-group exercise using actual patient letters about their longtime physician relationships [20]. Clearly, specific PFCC training would assist trainees in this patient-centered world. In addition, a toolkit for program directors that includes resources, tools, training and assessment methods could be used to train and evaluate residents in this critical ACGME competency [21]. However, there is no set communication curriculum or assessment process.

THE FUTURE OF RADIOLOGY: OUR TRAINEES

A comprehensive curriculum would teach the concepts of PFCC, such as communication skills and patient experiences, through reflective exercises, simulation, formal didactics, and other approaches.

Reflective exercises include small groups discussing case-based scenarios and/or listening to patients' stories. The didactic series should include topics related to proper communication skills, support or reasoning for developing those skills, and the importance of PFCC. Simulations can be low or high fidelity, presented in real time or via video, and all activities include postsimulation debriefing sessions. After these activities, program directors or others can assess whether trainees are at the expected level of understanding as to satisfy the ACGME milestone or if they are deficient. One assessment tool, the Kalamazoo Communication Skills Assessment Tool for Radiologists, has been scientifically developed and validated and should be included in the curriculum [22]. The aforementioned curriculum is one example, but clearly each program will need to determine how to best use its own resources to implement a curriculum.

PFCC curricular development may not be without challenges. The most difficult hurdle may be demonstrating the importance of PFCC training to both trainees and faculty members. There are those who still doubt this need. Other perceived obstacles, such as lack of access to a high-fidelity simulation center, are no obstacles at all. For

example, a low-fidelity exercise could involve discussion around a video of a challenging communication scenario or having trainees complete a role-playing exercise in which they try out different approaches to breaking bad news.

Regardless of approach, as patients voice their need for more communication from their physicians and as trainees and radiologists desire more tools to help them talk to patients, it is time for residency programs to take the first steps toward implementing a PFCC curriculum. This curriculum would meet not only the needs of the ACGME requirements but also will prepare the future generation to add real value to patient care.

ACKNOWLEDGMENTS

We thank James Rawson, MD, chair of the Commission on Patient- and Family- Centered Care, and Cheri Canon, MD, chair of the Education Committee of the Commission on Patient- and Family- Centered Care, for their leadership, guidance, and passion for PFCC. In addition, we would like to thank our patient advocate, Donna Adams, for all her help and input. Last but not least, we are indebted to Elizabeth Bleu and Robin Wyatt, our wonderful ACR staff members. Their hard work and enthusiasm for PFCC have made our job much easier. Every member of this team contributed to its success!

REFERENCES

- Kolata G. Radiologists are reducing the pain of uncertainty. The New York Times, November 24, 2014. Available at: https://www.nytimes. com/2014/11/25/health/radiologists-arereducing-the-pain-of-uncertainty.html?_r=0. Accessed January 31, 2018.
- Glazer GM, Ruiz-Wibbelsmann JA. The invisible radiologist. Radiology 2011;258: 18-22.

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- Allen B Jr. Introducing the ACR Commission on Patient Experience. ACR Bulletin, August 2015. Available at: https://acrbulletin.org/ august-2015/254-boc-patient-experience-acr. Accessed January 31, 2018.
- Rawson J, Moretz J. Patient- and familycentered care: a primer. J Am Coll Radiol 2016;13:1544-9.
- Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. N Engl J Med 2012;366:1051-6.
- Vydareny KH, Amis ES Jr, Becker GJ, et al. Diagnostic radiology milestones. J Grad Med Educ 2013;5(1 suppl 1): 74-8.
- Bazzocchi M. Doctor-patient communication in radiology: a great opportunity for future radiology. Radiol Med 2012;117: 339-53.
- Meguerditchian AN, Dauphinee D, Girard N, et al. Do physician communication skills influence screening mammography utilization? BMC Health Serv Res 2012;12:219.
- **9.** Lown BA, Sasson JP, Hinrichs P. Patients as partners in radiology education: an innovative approach to teaching and assessing patient-centered communication. Acad Radiol 2008;15:425-32.

- 10. Miller LS, Shelby RA, Balmadrid MH, et al. Patient anxiety before and immediately after imaging-guided breast biopsy procedures: impact of radiologist-patient communication. J Am Coll Radiol 2013;10:423-31.
- Narayan A, Dromi S, Meeks A, Gomez E, Lee B. Breaking bad news: a survey of radiology residents' experiences communicating results to patients. Curr Probl Diagn Radiol 2018;47:80-3.
- Harvey JA, Cohen MA, Brenin DR, Nicholson BT, Adams RB. Breaking bad news: a primer for radiologists in breast imaging. J Am Coll Radiol 2007;4:800-8.
- 13. Cardinal JS, Gunderman RB, Tarver RD. Informing patients about risks and benefits of radiology examinations: a review article. J Am Coll Radiol 2011;8:402-8.
- 14. Donnelly L, Strife J. Establishing a program to promote professionalism and effective communication in radiology. Radiology 2006;238:773-9.
- Jenkins V, Fallowfield L. Can communication skills training alter physicians' beliefs and behavior in clinics? J Clin Oncol 2002;20:765-9.
- 16. DeBenedectis CM, Gauguet JM, Makris J, Brown SP, Rosen MP. Coming out of the dark: a curriculum for teaching and

- evaluating radiology residents' communications skills through simulation. J Am Coll Radiol 2017;14:87-91.
- 17. Fallowfield L, Jenkins V, Farewell V, et al. Enduring impact of communication skills training: results of a 12-month follow-up. Br J Cancer 2003;89:1445-9.
- Miller MM, Slanetz PJ, Lourenco AP, Eisenberg RL, Kung JW. Teaching principles of patient-centered care during radiology residency. Acad Radiol 2016;23: 802-9.
- Gunderman RB, Brown BP. Teaching interpersonal and communication skills. Acad Radiol 2012;19:1589-90.
- Association of University Radiologists.
 Professionalism curriculum resources.
 Available at: https://www.aur.org/Professional
 Curriculum. Accessed January 31, 2018.
- Sarkany D, DeBenedectis C, Brown S. A review of resources and methodologies available for teaching and assessing patientrelated communication skills in radiology. Acad Radiol. In press.
- 22. Brown SD, Rider EA, Jamieson K, et al. Development of a standardized kalamazoo communication skills assessment tool for radiologists: validation, multisource reliability, and lessons learned. AJR Am J Roentgenol 2017;209:1-7.

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The authors have no conflicts of interest related to the material discussed in this article.

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