A Leadership Development Curriculum for Radiology Residency

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Setting and Problem

Diagnostic radiology is a 4-year residency (following a 1-year general internship). Recently, the American Board of Radiology (ABR) modified its testing schedule and requirements, and the Accreditation Council for Graduate Medical Education (ACGME) followed suit, to allow more flexibility in how fourth-year radiology residents spend their time. The Vanderbilt Department of Radiology, with its long history of producing leaders in radiology, took this change as an opportunity to develop a leadership development curriculum that allows for practical training under a broad definition of leadership.

Leadership at academic centers is often viewed in the research paradigm (eg, residents who do research, publish, and go on to tenure-track academic positions are considered to be “leaders” in a way that others sometimes are not). Although we view the “research track” as an important and viable route toward leadership development, many of our alumni achieve success and become leaders in other aspects of academics and private practice. Thus, it was important that our new curriculum not only address the different facets of physician leadership, but also have the flexibility to allow our residents to customize a pathway that best leads them to their own vision of success.

Intervention

While the changes made by the ABR and the ACGME focused on the final year of residency, we found it necessary to implement a program that permeated all 4 years of residency. We chose 5 core areas of training for our curriculum: research, education, business/management, quality care/service, and information technology. The program is divided into 2 phases: “leadership fundamentals” during the first 2 years of residency, and “leadership tracks” during the final 2 years.

Leadership fundamentals gives the residents both didactic training and experience in all 5 core areas. A monthly lecture series brings in outside speakers to teach content covering the basics in the 5 core areas. In addition, residents are given real-world experiences in these areas. For example, in addition to lectures about research methods, bias, statistics, and related topics, every resident is

paired with a National Institutes of Health–funded imaging scientist and is given a half day of research every week for a year.

Customization of the curriculum occurs in the final 2 years of residency, when residents choose a core leadership area on which to focus. They are paired with 1 or more mentors outside of the department. Residents apply for nonclinical time to our leadership committee and are granted either blocks of time (eg, a number of months off clinical service) or periodic time (eg, a day per week) to work on their leadership projects. During this time, their mentors place them on existing teams working on real issues or problems within the institution. While the nonclinical time is not reimbursed through Medicare, there is little net effect because the institution already exceeds its cap by a large margin.

Outcomes to Date

We are now a year and a half into the implementation of the leadership program. Leadership fundamentals, a mandatory part of the program, has received universal praise from the residents and requests for expansion of the program. While the leadership tracks phase of the program was optional, to date every resident has chosen to participate, likely because of the fact that each of them has the opportunity to customize his or her entire path. While the long-term success will be unknown for many years to come, in the short term the program has been tremendously positive. The leadership projects have given the residents unique experiences in areas that they have chosen. Two residents with long-term interests in interventional radiology and catheter development have worked with the Vanderbilt Center for Technology Transfer and Commercialization. Another, interested in an academic career focused on education, is actively working with an anatomy professor to develop a medical anatomy course for senior medical students. One more with an interest in an academic research career worked with imaging scientists, has submitted 2 manuscripts, and recently submitted a society grant proposal to help fund her academic time well into her fellowship.

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