Advances in Radiation Oncology (2023) 8, 101182

advances in radiation oncology

www.advancesradonc.org

Brief Opinion

Challenges and Solutions for Establishing Robust Diversity, Equity, and Inclusion Efforts in US Academic Radiation Oncology Departments

Sara Beltrán Ponce, MD,[a,*] Idalid Franco, MD, MPH,[b] Kelly C. Paradis, PhD,[c,1] and Malcolm D. Mattes, MD[d,1]

[a]Department of Radiation Oncology, Medical College of Wisconsin, Milwaukee, Wisconsin; [b]Department of Radiation Oncology, Brigham and Women's Hospital, Dana-Farber Cancer Institute, Harvard Medical School, Boston, Massachusetts; [c]Department of Radiation Oncology, Michigan Medicine, Ann Arbor, Michigan; and [d]Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick, New Jersey

Received 9 January 2023; accepted 9 January 2023

Hospitals, medical schools, graduate medical education programs, and National Cancer Institute–designated cancer centers have accreditation standards for diversity, equity, and inclusion (DEI) that aim to address the unique challenges arising from each of these structures. Despite this, considerable value can be derived from individual departments having a defined organizational structure to guide DEI efforts to customize initiatives aimed at the unique needs of its workforce and patient population, build bridges between institutional strategies and individual health care workers, and complement the efforts of the institution as a whole. Establishing such a structure within radiation oncology (RO) departments is likely to be particularly valuable, given that RO lags behind medicine as a whole in workforce diversity, with only 33% of physician trainees and 26% of practicing physicians being women and 7% of trainee and practicing physicians being underrepresented in medicine (UIM).[1] With a heightened focus on improving the diversity within our field, RO professionals have called for tangible improvements to foster a better landscape for historically and presently excluded individuals and better meet the needs of a diverse patient population, but this will only be achieved through proactive and intentional approaches at every level of RO leadership, both locally and nationally.[2]

A critical initial step is defining departmental DEI leadership, a role that has significantly increased within RO departments over the past 2 years, with over half of existing DEI roles or committees being initiated since 2020.[3] Despite this, these positions continue to be ill defined, underfunded, and lacking the prestige of more traditional RO academic leadership roles. More often, these roles are held by early career, women, and UIM faculty, putting disproportionate burdens on these groups to move the field toward equity and potentially placing them in roles that do not pave paths to academic promotion or career advancement. Uncompensated work duties are more commonly completed by women compared with

Sources of support: This work had no specific funding.

Disclosures: Dr Ponce reports honoraria from the Radiation Oncology Institute and roles as the vice chair of the Society for Women in Radiation Oncology and associate vice-chair of the Equity and Inclusion Subcommittee of the Association of Residents in Radiation Oncology. Dr Franco reports grants and contracts from the Center to Reduce Cancer Health Disparities, National Cancer Institute, National Institute of Health, and the Center for Diversity and Inclusion at Brigham and Women's Hospital. Dr Paradis reports equity and wellness-focused grants from the University of Michigan and Michigan Medicine and honoraria from Varian Medical Systems. Dr Mattes reports research funding from the Radiation Oncology Institute, participation in the Diversity in Clinical Trials Career Development Program from the Bristol Myers Squibb Foundation, research funding from the New Jersey Health Foundation, and Self-Assessment–Continuing Medical Education honoraria from the American Society for Radiation Oncology. No other disclosures were reported.

[1] K.C.P. and M.D.M. contributed equally to this work.

*Corresponding author: Sara Beltrán Ponce, MD; E-mail: sbeltran@mcw.edu

https://doi.org/10.1016/j.adro.2023.101182

men, and even more so by women of color compared with White women.[4] This perpetuates the "minority tax" and assumptions that all UIM are and should be interested in this work, pigeonholing UIM colleagues into solving DEI problems created by the majority. As such, an open request for applications from interested individuals should be used to ensure the role is in line with an individual's career and personal goals. Additionally, all RO professionals have a responsibility to improve DEI in our field, and we should strive to ensure all voices are included, valued, and supported.[1-3]

Departmental DEI leadership roles often combine responsibilities for improving workforce diversity, promoting health equity among the patient population treated, and creating a culture of inclusion, belonging, and wellness within the department—all important, but unique topics.[5] With limitations in human capacity, 1 leader is incapable of adequately addressing each of these areas. For instance, although there are known benefits of workforce diversity for patient outcomes among vulnerable and underrepresented populations, focusing heavily in this area limits capacity to address the social determinants of health and systemic racism that lead to detrimental health outcomes among racial and ethnic minority, low socioeconomic status, and underinsured patients in the first place.[6] Appropriate resources, including dedicated time, financial compensation, and administrative support, should be allocated to each of these endeavors, and the responsibilities for leadership should be shared among multiple people with expertise and passion for their success and supported by departmental and organizational leadership.

To truly advance DEI within our field, it is imperative that work to improve health equity and increase workforce diversity is funded, respected, valued, compensated, and promoted. Leadership guides culture and values. If those at the top are establishing the importance of DEI within their departments and specialties, change can flourish, moving past well-intentioned, symbolic, and performative DEI initiatives to intentional and proactive actions that result in tangible steps forward.[7] Along these lines, there should be clearly defined expectations (eg, as part of performance reviews) that all members of the department participate in DEI initiatives, with appropriate protected time to facilitate their doing so. RO is not the only specialty struggling to adequately acknowledge this work, and others have noted that a lack of structure and support limits the potential of new initiatives, increases turnover, and halts progress.[8] We must also focus on initiatives that improve the pipeline into specialties and leadership roles, including exposure for UIM trainees, recruitment initiatives, and holistic application review at all levels. This requires intentional, direct efforts at recruiting and retaining UIM faculty and trainees; examples include the RISE program which offered a 1-week virtual away rotation for UIM medical students and work to help reimagine the residency matching and interview system for both medical and physics trainees.[9,10] Additionally, RO professionals may benefit from training directed at exploring antiracism and social justice; similar programming has been shown to improve comfort in engaging topics related to race and incorporating them into their own future teachings.[11]

National organizations, such as the American Society for Radiation Oncology (ASTRO), have expanded DEI efforts beyond previous dedicated opportunities for medical student research exposure to RO through the ASTRO Minority Summer Fellowship Award to career development opportunities for early-career faculty through the Leadership Pipeline Program, development of the YouTube DEIinRO series, and resident-led creation of the Association of Residents in Radiation Oncology Equity and Inclusion Subcommittee. Additionally, the recent elevation of the Committee on Health Equity, Diversity, and Inclusion to a council places 2 DEI leaders as voting members of the ASTRO board. These national efforts are important for minoritized individuals, but their effect on culture and views of individual departments and personnel is unknown.

As such, it is imperative that individual departments take ownership over persistent workforce disparities. Pay equity and protected time for DEI leadership roles are possible; however, this requires systemic approaches and dedication to correcting these injustices that align the values and goals with those of individual departmental DEI efforts. This provides opportunities for the development of diverse committees within departments as well as interdepartmental collaborations across institutions wherein RO departments may benefit from partnerships with public health, population science, medical school DEI deans, and hospital-based DEI departments. Having a departmental DEI "champion" can help to facilitate these broader connections and elevate programming. Though these are not traditional collaborators within our field, an increased DEI focus opens avenues for new relationships to expand community engagement, health equity work, and programs dedicated to improving workforce diversity.

Departments, institutions, and societies must ensure diverse representation within committees, asking who is not present and intentionally inviting new voices to the table. Inclusion should extend beyond physicians to physicists, therapists, dosimetrists, nurse practitioners and physician assistants, researchers and research assistants, administrators, social workers, physical therapists, and other individuals interested in influencing DEI institutional landscapes. Additionally, the presence of patients and patient advocates is uncommon and worth exploring as a step toward community engagement and participation. Once DEI committees are formed, it is important to consider consensus-based decision-making models to encourage and empower all committee members and

Table 1 Development of DEI leadership positions and institutional/departmental DEI efforts

Benchmark	Description
Allocation of time	DEI leaders should have at least 20% of their time dedicated to this role.[14]
Funding	Dedicated time should be funded at the same salary as clinical or research time.[14]
Career trajectory	Participation in DEI initiatives should be listed as benchmarks for promotional tracks in leadership, education, or others based on departmental promotion structure.
Administrative support	Administrative assistance should be provided to ensure robust operation of DEI efforts.
Clearly identified roles	Departments should differentiate unique roles related to workforce diversity, health equity, wellness, or other initiatives.
Departmental culture	Departments should establish a culture of support for DEI initiative including significant investment from leadership.[7]
Institutional collaborations	As DEI initiatives are developed, departments should seek unique and novel partnerships outside of the department.
Inclusion in departmental leadership	Departmental staff and leadership composition should reflect the populations they serve. Workforce diversity should be considered in recruitment, hiring, and promotional decisions.
Routine evaluation	New initiatives should be regularly evaluated to ensure positive effect based on their initial goals. Benchmarks should be set before initiation, and programming should be altered to ensure these goals are reached.[12]

Abbreviation: DEI = diversity, equity, and inclusion.

ultimately evaluate the effect of initiatives to ensure ongoing sustainability.[12] Internal reflection and adaptation to new programming are essential, with examples including the use of "diversity dilemma" case scenarios and discussions of lessons learned through DEI efforts.[13] Understanding the unique issues and problems at departmental levels allows for new, tailored initiatives that directly address identified gaps and allow for piloting and evaluation on a small scale. Routine assessment should occur at set intervals such as annually or every 2 years to understand effects and make real-time changes to programming and structure. Collection of data should extend beyond the traditional quantitative data collection to qualitative data that allow for a more in-depth understanding of the short-term and long-term effects of initiatives and innovations stemming from DEI leadership.

Tables 1 and 2 summarize specific challenges and recommendations to developing an organizational structure

Table 2 Engagement of medical and physics trainees in DEI

Benchmark	Description
Opportunities for community engagement	Trainees should be encouraged to participate in community events sponsored by the organization or department, particularly when related to cancer care. Community partnerships in which communities and patients are equal partners should be established.
Incorporation of social determinants of health in clinical discussions	Patient care discussions in clinic and tumor boards should include the effect of social determinants of health on patient care. Trainees should develop an understanding of available resources and prevalent challenges within the local community.
Recognition of DEI efforts	Trainees who participate in community engagement, DEI initiatives, or health equity research should receive the same departmental recognition and opportunities for grants and awards as those completing other projects within the department.
Incorporation in didactic education	Didactic sessions should include information about disparities in outcomes and barriers specific to the cancer discussed. Separate didactic sessions should focus on health equity, workforce diversity, and other important DEI-related topics.[11]
Recruitment and retention	Benchmarks for recruitment of women and underrepresented-in-medicine trainees should be created with steps for long-term retention.[14]
Pipeline programming	Departments and institutions should seek to develop programming that allows underrepresented students, both in medicine and physics, opportunities to explore and/or research within the field of radiation oncology and increase exposure to the field.[9,14]

Abbreviation: DEI = diversity, equity, and inclusion.

to support DEI efforts in RO departments and to enhance trainee DEI education. We also encourage RO professionals to review a recently published DEI dashboard designed for radiology departments, which describes 39 suggested activities and parameters modeled around faculty, residents, fellows, and medical student stakeholders, with associated criteria for each.[14] These practical consensus guidelines, endorsed by the Society of Chairs of Academic Radiology Departments, are in large part directly translatable to RO departments and expanded to include the diverse professionals within our field.

These efforts are critical in ensuring the highest quality of care for our patients and communities while fostering a sense of belonging within RO departments and health care as a whole. It is imperative that departments and institutions promote a culture of inclusion and belonging in which UIM providers are comfortable to show up as their authentic selves. Through the fostering of respect for the value for DEI work at all levels, including resources, funding, and support needed, DEI leaders can thrive as they move forward the departmental mission of health equity and workforce diversity. We should all feel a responsibility for driving this improvement for our field and our patients.

References

1. Chapman CH, Hwang WT, Deville C. Diversity based on race, ethnicity, and sex, of the US radiation oncology physician workforce. *Int J Radiat Oncol Biol Phys*. 2013;85:912-918.
2. Lightfoote JB, Fielding JR, Deville C, et al. Improving diversity, inclusion, and representation in radiology and radiation oncology part 2: Challenges and recommendations. *J Am Coll Radiol*. 2014;11:764-770.
3. Paradis KC, I Franco, Beltrán Ponce S, et al. The current state of departmental diversity, equity, and inclusion efforts within US academic radiation oncology departments [e-pub ahead of print]. *Int J Radiat Oncol Biol Phys*. https://doi.org/10.1016/j.ijrobp.2022.06.071, accessed July 15, 2022.
4. Armijo PR, Silver JK, Larson AR, Asante P, Shillcutt S. Citizenship tasks and women physicians: Additional woman tax in academic medicine? *J Womens Health*. 2021;30:935-943.
5. Crews DC, Collins CA, Cooper LA. Distinguishing workforce diversity from health equity efforts in medicine. *JAMA Health Forum*. 2021;2:e214820.
6. Schoenthaler A, Ravenell J. Understanding the patient experience through the lenses of racial/ethnic and gender patient-physician concordance. *JAMA Netw Open*. 2020;3:e2025349.
7. Amdur RJ, Mendenhall NP, Mendenhall WM, Dagan R, Yeung AR, Okunieff PG. Journey to diversity in a university radiation oncology residency program: The role of leadership and target goals. *Am J Clin Oncol*. 2021;44:45-48.
8. Taylor E, Dacus AR, Oni J, Suleiman LI. An introduction to the orthopaedic diversity leadership consortium: Advancement of our orthopaedic leaders of diversity, equity, and inclusion through networking, strategy, and innovation. *J Bone Joint Surg Am*. 2022;104:e72.
9. Franco I, Oladeru OT, Saraf A, et al. Improving diversity and inclusion in the post-coronavirus disease 2019 era through a radiation oncology intensive shadowing experience (RISE). *Adv Radiat Oncol*. 2021;6:100566.
10. Hendrickson KRG, Juang T, Rodrigues A, Burmeister JW. Ethical violations and discriminatory behavior in the MedPhys Match. *J Appl Clin Med Phys*. 2017;18:336-350.
11. Holdren S, Iwai Y, Lenze NR, Weil AB, Randolph AM. A novel narrative medicine approach to DEI training for medical school faculty. *Teach Learn Med*. 2022:1-10.
12. Lam JTH, Giroux RJP. Resident equity, diversity, and inclusion committee: A mechanism for programmatic change. *Acad Med*. 2021;97:770.
13. Amonoo HL, Levy-Carrick NC, Nadkarni A, et al. Diversity, equity, and inclusion committee: An instrument to champion diversity efforts within a large academic psychiatry department. *Psychiatr Serv*. 2021;73:223-226.
14. Oates ME, Coakley F, Cohen GS, Goodman TR, Yee J. Using an annual diversity, equity and inclusion dashboard to accelerate change in academic radiology departments [e-pub ahead of print]. *Acad Radiol*. https://doi.org/10.1016/j.acra.2022.07.007, accessed July 15, 2022.