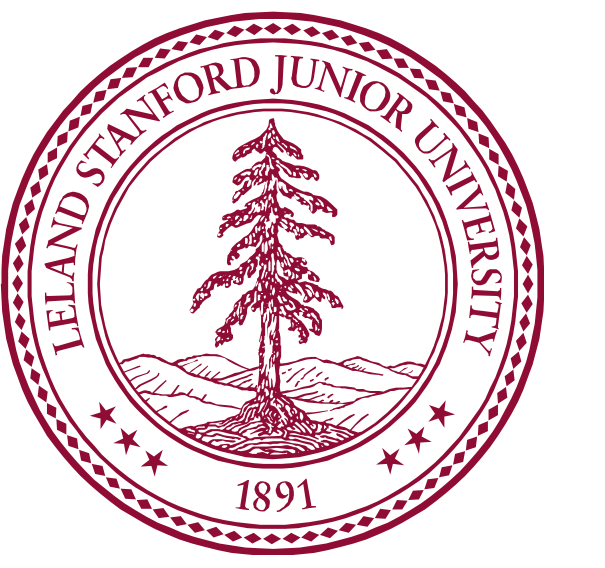


Prevalence of Diversity Statements and Disability Inclusion Among Radiology Residency Program Websites



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Introduction

Diversity in the healthcare workforce has gained importance over the past several years, with public health experts arguing that improvements to the diversity of the physician workforce may also reduce healthcare disparities for traditionally marginalized and underserved populations (1). The American Council of Graduate Medical Education (ACGME) recently revised its common program requirements to mandate that programs engage in "systematic recruitment and retention of a diverse and inclusive workforce of residents, fellows (if present), faculty members, senior administrative staff members, and other relevant members of its academic community" (2). While radiology has widely acknowledged the need to improve inclusion of racial, ethnic, gender and sexual minorities, with recent discourse also underscoring the importance of disability diversity and inclusion efforts (3-5), little progress has been made. Limited data on LGBTQ and disability prevalence in radiology hinder accurate assessment for these populations. By displaying content on diversity and inclusion on residency websites, programs may better convey their valuation of diversity to potential applicants, address concerns regarding inclusion, and ultimately increase a program's odds of recruiting diverse applicants to their program. The purpose of this study is to assess radiology residency program websites' diversity statements for inclusion of race/ethnicity, gender, sexual orientation, and disability as commonly underrepresented groups in medicine.

Methods

We conducted a cross-sectional, observational study of websites of all diagnostic radiology programs in the ERAS (Electronic Residency Application Service®) directory, excluding programs with missing or malfunctioning hyperlinks and those requiring a login to access diversity statements (Figure 1). Program websites that met inclusion criteria were audited for the presence and location of a diversity statement. We also assessed for the presence of four categories of diversity (race/ethnicity, gender, sexual orientation, and disability). For each website, binomial response variables (0=no, 1=yes) were used to notate each of the following: the presence of a diversity statement specific to the radiology residency program, to the radiology department, to the institution linked by the radiology residency or department, and not linked by the radiology residency or department and presence of each of the four diversity categories. Row and column totals and percentages were calculated and are presented in Table 1. Programs with a residency-specific statement were not evaluated for department or institution-level statements, and programs that did not have a residency-specific statement but did have a department-level statement were not evaluated for the presence of an institution-level statement. Statements of non-discrimination were not accepted as proxies for diversity statements.

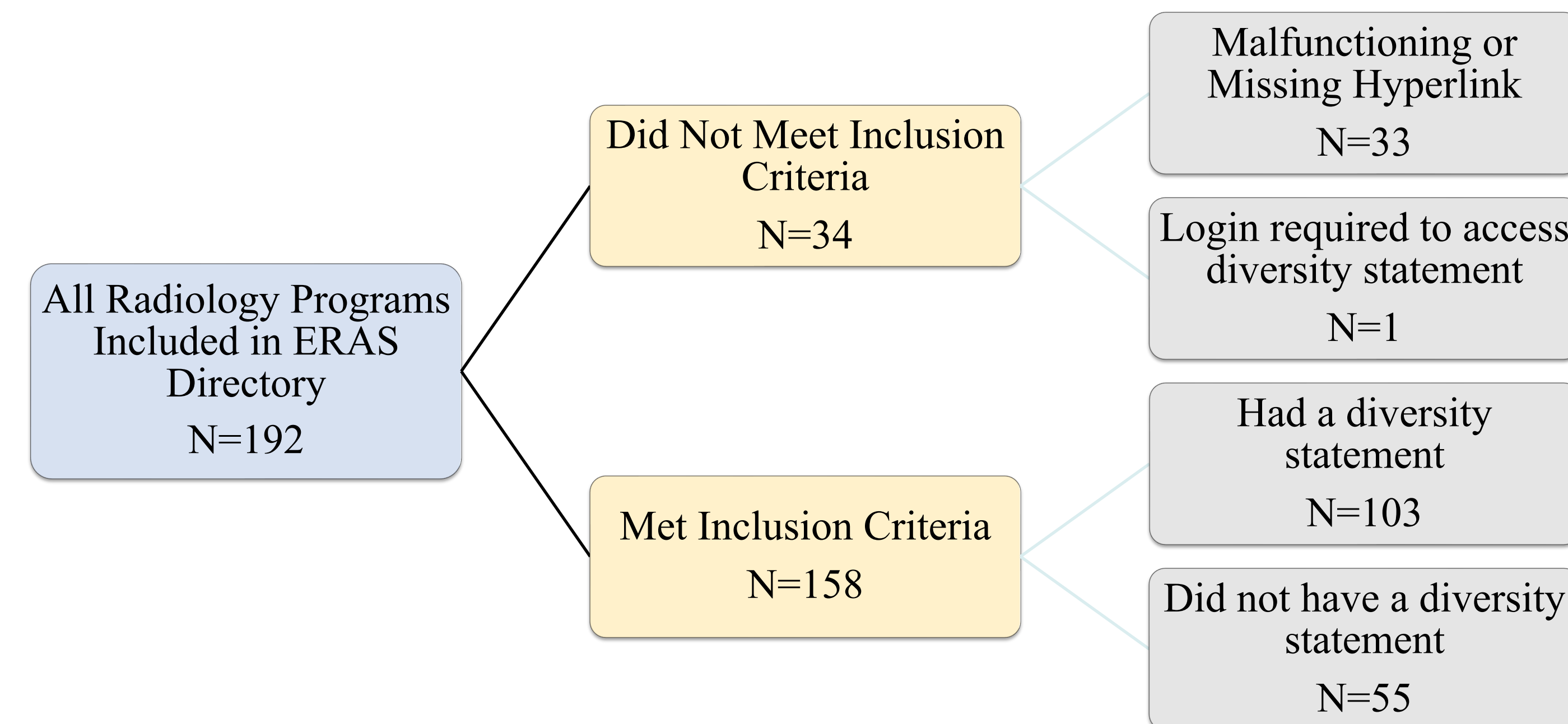


Figure 1. Breakdown of Program Included and Excluded Websites for ERAS Directory-listed Radiology Residency Programs

Results

192 radiology residencies were identified using ERAS. Programs with missing/malfunctioning hyperlinks (N=33) or required logins (N=1) were excluded. 158 program websites met inclusion criteria for analysis. Two-thirds (n=103; 65.1%) had a diversity statement either within their department or institution, 28 (18%) had residency-specific statements and 22 (14%) had department-specific statements. Among these, gender diversity was most frequently represented (43.0%), followed by race/ethnicity (39.9%), sexual orientation (32.9%), and disability (25.3%). Race/ethnicity was most-included in institution-level diversity statements.

Table 1. Presence and description of diversity statements of Radiology Residency Programs (N=158)

Component of Diversity Statement Present	Diversity Statement Present N = 103 (65%)			No Diversity Statement Present	Total (%)
	A statement or direct hyperlink for	Radiology department, but not the residency program	Institution, but not the residency program or department		
				No statement or direct hyperlink is present, but institutional statement is searchable	
Total (%)	28 (17.7%)	22 (13.9%)	8 (5.1%)	45 (28.5%)	55 (34.8%)
Race/Ethnicity	17	11	7	28	N/A
Gender	25	13	6	24	N/A
Sexual Orientation	15	10	6	21	N/A
Disability	11	6	4	19	N/A
No Specific Groups Mentioned	3	8	1	17	N/A

“If one considers people who now have disabilities..., people who are likely to develop disabilities in the future, and people who are or will be affected by the disabilities of family members or others close to them, then disability affects today or will affect tomorrow the lives of most Americans. Clearly, disability is not a minority issue.”

- Institute of Medicine



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Conclusions

Featuring diversity statements on program websites is one of the ways a radiology residency can signal its prioritization of diversity, equity and inclusion to prospective applicants. Our results, however, showed that only 65.1% (n=103/158) of radiology residency programs had any form of an online diversity statement (program, department, or institution). But only 17.7% (N=28/158) had a diversity statement specific to the residency program, and only 13.9% (n=22/158) had a departmental diversity statement. Explicit recognition of gender diversity was most prevalent within diversity statements specific to residency program or radiology departments. This likely reflects the prevalent familiarity of gender disparities within radiology. Racial and ethnic diversity was most frequently mentioned in institutional diversity statements but were less frequently seen in departmental or program statements. Unfortunately, across all statements, disability was the least frequently mentioned category, irrespective of where the diversity statement is listed (e.g., on the residency website, department website, institution, or elsewhere).

Despite over 25% of adults in the US identify as having a disability, only 4.6% of medical students and 3% of physicians identify as having a disability (Meeks 2020). The low prevalence of disability inclusion seen in our analysis further reinforces the importance of increased attention toward disability inclusivity measures within radiology (6). Trainees with disabilities face financial, structural and cultural barriers to entering radiology, including concerns over potential procedural requirements, lack of disability representation, and uncertainties regarding the compatibility of radiology workflow with health needs. Additionally, medical trainees with disabilities face additional barriers when applying to residency, such as concerns over program and site accessibility (especially for programs with multiple training sites), flexibility of emergency coverage in case of illness (especially within smaller sized programs), and a lack of clarity and confidence in a program's commitment to anti-ableism and consideration of atypical accommodations to help trainees with disabilities meet program requirements. Proactive inclusivity efforts by programs may aid in reducing these barriers.

Further research on disability prevalence in the radiology and disability-specific inclusivity efforts would offer valuable insight into improving disability recruitment within radiology. Additionally, focused research into accommodations experiences of radiology residents with disabilities would offer prospective applicants' greater insight into potential challenges and allow programs to better isolate methods for improving resident inclusivity. Our study is limited by its focus on program websites exclusively, as it does not account for other ways residency programs may also address diversity and inclusion.

Disclosures, Funding, and References

The authors declare no conflicts of interest. No funding was used to conduct this study. References: 1. Silver JK, Bean AC, Slocum C, et al. Physician Workforce Disparities and Patient Care: A Narrative Review. *Health Equity*. 2019;3(1):360-377. Published 2019 July 1. doi:10.1089/hecq.2019.0040 2. Accreditation Council for Graduate Medical Education. Common Program Requirements. [ACGME Website]. 2022. Available at: https://www.acgme.org/globalassets/pfassets/programrequirements/cprresidency_2022v3.pdf. Accessed on October 8, 2022. 3. Hall TR, Brown K. Diversity in radiology: the right thing to do, the smart thing to do [published correction appears in *Pediatr Radiol*. 2022 September 9;]. *Pediatr Radiol*. 2022;52(9):1711-1718. doi:10.1007/s00247-022-05416-5. 4. Manik R, Sadigh G. Diversity and inclusion in radiology: a necessity for improving the field. *Br J Radiol*. 2021;94(1126):20210407. doi:10.1259/bjr.20210407 5. Guerrero-Calderson JD, Lozano K, DeBenedictis CM, Shannon L, Viswanathan C, Kagetsu NJ. Disability: An Important Dimension of Diversity. *J Am Coll Radiol*. 2021;18(11):1585-1587. doi:10.1016/j.jacr.2021.07.013 6. Nouri Z, Dill MJ, Conrad SS, Moreland CJ, Meeks LM. Estimated Prevalence of US Physicians With Disabilities. *JAMA Network Open*. 2021;4(3):e211254-e. doi:10.1001/jamanetworkopen.2021.1254