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# Lessons Learned From an Integrated Neurology Diversity, Equity, and Inclusion Curriculum

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## Abstract

The University of California San Francisco Neurology Department incorporated a formal diversity, equity, and inclusion curriculum into the residency education in 2015. During that time, we have learned a number of lessons that can be useful to other institutions planning similar initiatives including the following: (1) training should be led by a multidisciplinary team with experienced educators, (2) sustainability of the curriculum requires broad departmental buy-in from leadership to junior faculty to the residents themselves, (3) the curriculum needs to balance training on fundamental topics with flexibility to change in response to current events and the needs of the community, and (4) the sessions need to be practical.



Training in diversity, equity, and inclusion (DEI) is vital to providing culturally appropriate care. However, if we are not training our future clinicians to be culturally humble and responsive, how can we ensure that they deliver care in this manner? Disparities are rampant in medicine, including neurology. For example, compared with white Americans, African Americans have a higher burden of disease and mortality in stroke and more severe disease with poorer prognosis in multiple sclerosis.<sup>1,2</sup> The lack of formalized culturally responsive care in neurology residency training across the country has been well documented, despite most program directors acknowledging the importance of such training.<sup>3</sup> Recent events, including the deaths of George Floyd and Breonna Taylor, have brought renewed attention and galvanized a movement for racial justice throughout the country and in academic neurology.<sup>4</sup> In this current context, the importance of DEI, and the crucial role played by individuals in public service including neurologists, is amplified. The Department of Neurology at the University of California San Francisco first incorporated a formal diversity curriculum into our residency education in 2015. We have learned many lessons while implementing this curriculum that are worth sharing to aid other institutions planning to formally incorporate such important curricular initiatives.

## Lessons Learned

- Training should be performed by a multidisciplinary team, featuring qualified and experienced educators from various interdisciplinary backgrounds, including medical specialties, public health, medical ethics, medical anthropology, nursing, and social work.<sup>5</sup> Inclusion of frontline workers from community-based agencies which serve marginalized and underserved populations is helpful in providing relevant practical experiences and perspectives.<sup>5</sup> In addition, including patient testimonials can help residents understand the patient point of view and solidify the impact DEI training has on individual patient care. Tapping into the expertise of other disciplines, including Graduate Medical Education resources, is crucial to accessing the

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**Figure 1** University of California, San Francisco, Neurology Department Diversity, Equity, and Inclusion Curriculum Plan



LGBTQ = lesbian, gay, bisexual, transgender and queer, or questioning.

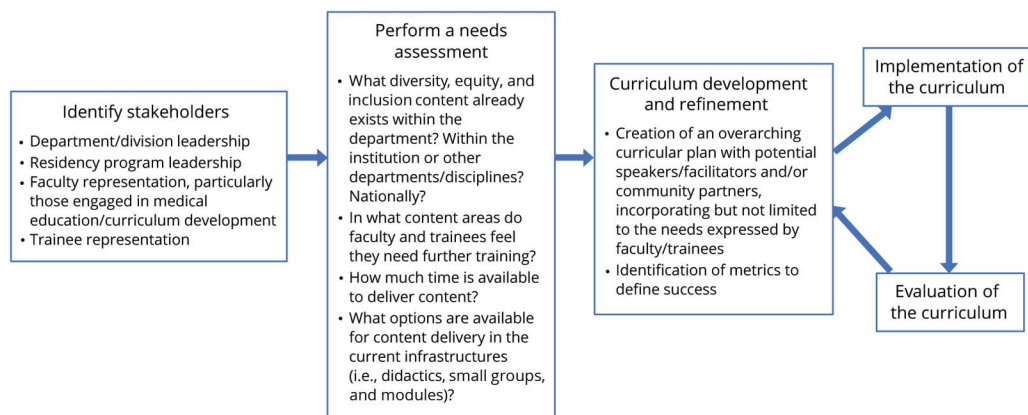
experience and knowledge of leaders in DEI and providing additional insight outside of neurology. Broadening the pool of potential educators also serves to not over-rely on or burden a single individual or group to provide the full range of content.

- Institutionalizing training and education in DEI is challenging and requires buy-in from the entire department including leadership, faculty at all levels of seniority, and the trainees themselves. As with other change management processes, this requires identification and targeted engagement of key stakeholders around the importance and impact of this training on the shared goal of delivering equitable patient care. Department leadership recognizes the importance of these efforts and provides support to faculty and trainees to develop and implement the curriculum. This collective investment will establish consistent educational and clinical environments in which DEI is the default model instead of

the exception and provides financial and other resources needed for such a program to succeed.<sup>6</sup> This article can be presented to department chairs as an example of a successful DEI program to help propel change.

- The DEI curriculum needs to be formally incorporated into the overall residency educational plan and requires dedicated infrastructure and administrative support to ensure sustainability. This can be accomplished through direction and oversight of the departmental diversity committee, a departmental diversity officer,<sup>7</sup> or other official role along with that of the residency program leadership. This responsibility should be appropriately resourced to carve out some participating individuals' time rather than relying purely on volunteer efforts. If departmental funding is not available to support these efforts, other options could include institutional funding, grants through local organizations, philanthropy, or support from national organization such as the Association of American Medical Colleges.
- The curriculum needs to strike a balance when designing content between core content and timely response to needs. For example, training on core systemic racism topics ensures that all trainees have shared familiarity and language to discuss these issues; however, flexibility to address topics that respond to current events involving discrimination provides a practical educational program that can serve the needs of the community in real time. See Figure 1 for an example of our curriculum plan. By incorporating DEI content into the overarching residency educational plan, programs can ensure that all residents are exposed to the breadth of topics in a staged manner over the course of their training while allowing for ad hoc training and perspective that can be used practically by the trainees.
- Many DEI topics are not exclusive to neurology; however, it is important to incorporate neurologic examples when available. As an example, a didactic on lesbian, gay, bisexual, transgender and queer, or questioning (LGBTQ)+ health can discuss the history of LGBTQ+ identity in health care, ongoing structural discrimination affecting health access

**Figure 2** Proposed Workflow for Initiating a Diversity, Equity, and Inclusion Curriculum



and outcomes in the community, and what is known about neurologic disparities in the LGBTQ+ community.

- Above all, the sessions need to be practical. Trainees want concrete tools to use in clinical practice.<sup>3</sup> For example, a discussion of structural determinants of health may start with basic concepts and examples of manifestations in neurologic care and can then segue into how to perform a screening neurologic interview for these structural issues, highlighting local resources available for clinicians and patients when patient needs are identified.

## Conclusion

The future of DEI resident education in neurology is promising. An increasing number of programs are critically evaluating their educational content through the lens of structural racism and health equity. Incorporating a formal curriculum is a first step (Figure 2); once established, evaluation of the efficacy of DEI education over time and impact on patient care outcomes will be paramount to honing and adapting future education efforts, particularly because the ideal structure of curricular content and quantity remains unknown. In the era of COVID-19 and the normalization of virtual meetings, programs are increasingly able to access and share these resources widely, allowing program to engage national and international experts and bypass barriers that once existed. Smaller departments may have the opportunity to virtually participate with the DEI efforts of other institutions, supporting a nationwide effort to improve neurology DEI training. Many of these lessons can also be extended to faculty training in DEI, an essential step in creating an inclusive departmental environment because faculty serve as role models for clinical practice in their interactions with trainees. As these efforts mature, the next step in diversity curricula is that content will be interwoven into all aspects of the general neurology residency training rather than existing as a separate entity within the larger curriculum, thereby seamlessly equipping future clinicians to be culturally humble and responsive.

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Name	Location	Contribution
Noriko Anderson, MD, MPH	University of California, San Francisco	Draft and revision of article for intellectual content
S. Andrew Josephson, MD	University of California, San Francisco	Revision of article for intellectual content
Nicole Rosendale, MD	University of California, San Francisco	Study conceptualization and critical revision of article for intellectual content

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