


Association of Lesbian, Gay, Bisexual, and Transgender (LGBT) Cultural Competency Training With Provider Practice Characteristics and Perceptions of Patient Care

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ABSTRACT

BACKGROUND: While issues related to lesbian, gay, bisexual, and transgender (LGBT) health are increasingly incorporated into medical training, there remains limited guidance and opportunities for continuing medical education in LGBT health. It is unclear how participation in LGBT-specific training is distributed across physician specialties and practice regions. Additionally, national data assessing cultural competency training for physicians are scarce and do not delineate LGBT-specific training or training completed prior to, during, or after graduate medical education.

METHODS: Using data from the 2016 National Culturally and Linguistically Appropriate Services Physician Survey, this study evaluated patterns of post-residency cultural competency training, as well as associations between LGBT-specific training and provider perceptions of patient care outcomes.

RESULTS: Provider specialty, practice region, and receiving cultural competency training as a trainee were associated with post-residency LGBT-specific training. Surgical providers (odds ratio [OR]: 0.42; confidence interval [CI] 0.25–0.73; $p = .002$) and those practicing in the South (OR: 0.49; CI: 0.26–0.92; $p = .025$) had lower odds of completing LGBT-specific cultural competency training while in independent practice. Post-residency LGBT-specific training was associated with provider agreement that cultural competency training improves the quality of care (OR: 2.76; CI: 1.44–5.28; $p = .002$), patient satisfaction (OR: 2.55; CI: 1.32–4.93; $p = .005$), and patient comprehension (OR: 2.03; CI: 1.05–3.90; $p = .034$).

CONCLUSIONS: Our findings provide disaggregated analyses that nuance the assessment of cultural competency interventions and support a broader effort to increase attention to LGBT health in continuing medical education.

KEYWORDS: cultural competency, LGBT, sexual and gender minorities, continuing medical education, patient outcomes

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Introduction

Despite national calls across the United States (US) to improve care for lesbian, gay, bisexual, and transgender (LGBT) patients and increased attention to LGBT health in medical school and residency curricula, there is still a paucity of LGBT cultural competency training in continuing medical education (CME).^{1,2} A previous study of US academic centers revealed that only 15% had a list of physicians who had participated in LGBT cultural competency training.³ There is virtually no data on the amount or frequency of LGBT health CME completed by providers nationwide, especially in nonacademic settings, and existing CMEs have limited effectiveness data.² We use the term “cultural competency” in this article to align with the literature and data analyzed, recognizing that cultural humility (defined by life-long learning and critical introspection) is preferred to “competence.” A recent systematic review found that LGBT cultural competency training has largely focused on knowledge acquisition and feasibility, with much smaller and variable effects on provider perceptions and attitudes.⁴ National data

on provider perceptions of the impact of cultural competency training on patient care outcomes do not disaggregate training specific to LGBT communities or differentiate between undergraduate, graduate, or post-residency training.⁵ It is also unclear whether rates of attaining LGBT-specific training after residency differ across specialties and geographic practice regions. To address these gaps, we evaluated patterns of post-residency LGBT-specific cultural competency training and associations with provider perceptions of patient care outcomes.

Methods

We performed a cross-sectional analysis of the National Culturally and Linguistically Appropriate Services (CLAS) Physician Survey accompanying the 2016 National Ambulatory Medical Care Survey.⁶ The Centers for Disease Control used this supplement in 2016 only, limiting the inclusion of more contemporaneous data. A total of 2,700 hospital- or office-based physicians in specialties other than anesthesia, pathology, or radiology were eligible for the survey.⁶ There were 397 respondents, of which 392



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Table 1. Physician demographics, practice information, and CC training (unweighted: $n = 392$; weighted: $n = 291,180$).

CHARACTERISTIC	N	%	NO POST-RESIDENCY CC TRAINING	NON-LGBT-SPECIFIC CC TRAINING	LGBT-SPECIFIC CC TRAINING	P-VALUE
			UNWEIGHTED N = 207, WEIGHTED N = 153,387	UNWEIGHTED N = 59, WEIGHTED N = 36,201	UNWEIGHTED N = 126, WEIGHTED N = 101,591	
Sex ^a						.248
Female	131	33	65	15	47	
Male	266	67	142	44	79	
Race ^b						.782
White	281	70.8	143	43	95	
Other	87	21.9	49	13	24	
Unknown	29	7.3	15	3	7	
Ethnicity						.329
Hispanic or Latino/a/x	25	6.3	16	5	4	
Not Hispanic or Latino/a/x	353	88.9	183	53	115	
Unknown	19	4.8	8	1	7	
Age						.095
Under 50 years	127	32	73	12	41	
50 years and over	270	68	134	47	85	
Specialty						.024
Primary Care	129	32.5	58	17	53	
Medical Care	134	33.8	77	25	30	
Surgical Care	134	33.8	72	17	43	
Geographic region of practice						.082
Northeast	97	24.4	40	18	38	
Midwest	103	25.9	55	17	30	
South	102	25.7	62	15	24	
West	95	23.9	50	9	34	
Years in practice						.116
Under 25	163	41.1	96	17	47	
25 or more	214	53.9	101	38	74	
Received cultural competency training as a trainee						.000
Yes	179	45.1	64	30	83	
No	214	53.9	141	29	43	

Abbreviations: CC, cultural competency; LGBT, lesbian, gay, bisexual, and transgender; CLAS, Culturally and Linguistically Appropriate Services.

^aCLAS recorded binary sex; information on gender identity was not collected.

^bCLAS collapsed non-White races to minimize disclosure risk to participants.

provided self-reported information on cultural competency training subtypes and were included in this study.

Participants were categorized as having post-residency LGBT-specific cultural competency training, cultural competency training

not specific to LGBT communities, or no related training. Provider perception outcomes of interest were recoded into a 3-point Likert scale (eg, disagree/agree/strongly agree or never/sometimes/often) and included knowledge of patient beliefs and

Table 2. CC training by physician specialty and region (unweighted: $n = 392$; weighted: $n = 291,180$).

PHYSICIAN SPECIALTY, ^a BY REGION ^b	NO POST-RESIDENCY CC TRAINING	NON-LGBT-SPECIFIC CC TRAINING	LGBT-SPECIFIC CC TRAINING
	Unweighted: $N = 207$; weighted: $N = 153,387$	UNWEIGHTED: $N = 59$; WEIGHTED: $N = 36,201$	UNWEIGHTED: $N = 126$; WEIGHTED: $N = 101,591$
<i>N</i> (% ACROSS CC TRAINING)			
Primary care			
Northeast	11 (32.4)	7 (20.6)	16 (47.1)
Midwest	14 (43.8)	3 (9.4)	15 (46.9)
South	17 (53.1)	5 (15.6)	10 (31.3)
West	16 (53.3)	2 (6.7)	12 (40.0)
Medical care			
Northeast	18 (52.9)	5 (14.7)	11 (32.4)
Midwest	18 (51.4)	8 (22.9)	9 (25.7)
South	21 (67.7)	1 (3.2)	9 (29.0)
West	15 (46.9)	3 (9.4)	14 (43.8)
Surgical care			
Northeast	11 (39.3)	6 (21.4)	11 (39.3)
Midwest	23 (65.7)	6 (17.1)	6 (17.1)
South	24 (63.2)	9 (23.7)	5 (13.2)
West	19 (61.3)	4 (12.9)	8 (25.8)

Abbreviations: CC, cultural competency; LGBT, lesbian, gay, bisexual, and transgender; OR, odds ratio; CI, confidence interval.

^aLogistic regression by specialty: Primary care (ref); medical care (OR: 0.68; CI: 0.41–1.13; $p = .134$); surgical care (OR: 0.42; CI: 0.25–0.73; $p = .002$).

^bLogistic regression by region: Northeast (ref); Midwest (OR: 0.65; CI: 0.36–1.19; $p = .164$); South (OR: 0.49; CI: 0.26–0.92; $p = .025$); West (OR: 0.90; CI: 0.50–1.64; $p = 0.742$).

values; perceptions of patient satisfaction, comprehension of and adherence to treatment and lifestyle recommendations, trust, and quality of care; and consideration of cultural factors in assessing medical needs and conducting health education. Bivariate analyses were performed using chi-squared and Fisher's exact tests to evaluate for differences between groups. We used Brant tests to test proportional odds assumptions. Multivariate logistic regression was then performed with applied survey weights, controlling for physician sex, age, race, ethnicity, specialty, and cultural competency training as a trainee. LGBT-specific training patterns across physician specialties and practice regions were analyzed using standard logistic regression. Statistical significance was set at 2-tailed $\alpha < 0.05$ for all analyses, conducted using Stata 18.0 (College Station, TX).

This study is reported in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement (Supplemental Appendix A).⁷

Results

Respondents were predominantly male (67%), White (71%), and 50 years or older (68%) (Table 1). Almost half (47%) had completed some form of post-residency cultural competency

training, and of those participants, 68% completed training specific to LGBT communities. In total, 45% of all participants received cultural competency training in medical school or residency. Primary care respondents and those who had received cultural competency training as a trainee more often reported post-residency cultural competency training. The type of cultural competency training also differed by specialty and region of practice: surgical providers (odds ratio [OR]: 0.42; confidence interval [CI]: 0.25–0.73; $p = .002$) and those practicing in the South (OR: 0.49; CI: 0.26–0.92; $p = .025$) had lower odds of completing LGBT-specific training (Table 2).

Compared to those with no post-residency cultural competency training, those with LGBT-specific training had higher odds of agreeing that cultural competency training improves the quality of care (OR: 2.76; CI: 1.44–5.28; $p = .002$), patient satisfaction (OR: 2.55; CI: 1.32–4.93; $p = .005$), and patient comprehension (OR: 2.03; CI: 1.05–3.90; $p = .034$) (Table 3). There were no differences in outcomes when comparing respondents who completed cultural competency training that did not include LGBT populations to those who did not complete any training. No statistical differences were found across groups for the other outcomes.

Table 3. Multivariate logistic regression for physician perceptions of patient-related outcomes by cultural competency (CC) training (unweighted: $n = 392$; weighted: $n = 291,180$).

OUTCOME	NON-LGBT-SPECIFIC CC TRAINING ^a	UNWEIGHTED: $N = 59$; Weighted $N = 36,201$	LGBT-SPECIFIC CC TRAINING ^a	UNWEIGHTED: $N = 126$; WEIGHTED: $n = 101,591$
	OR (CI)	P-VALUE	OR (CI)	P-VALUE
How knowledgeable are you of your patients' health beliefs, customs, and values?	0.94 (0.47–1.88)	.864	1.13 (0.57–2.43)	.728
<i>By providing culturally and linguistically appropriate services to my patients I expect:</i>				
Improved patient satisfaction with the services provided	1.28 (0.58–2.81)	.544	2.55 (1.32–4.93)	.005
Improved comprehension of treatment and lifestyle recommendations	1.21 (0.59–2.49)	.595	2.03 (1.05–3.90)	.034
Better adherence to treatment and lifestyle recommendations	1.39 (0.65–3.01)	.398	1.70 (0.91–3.15)	.095
Improved patient trust	1.13 (0.50–2.56)	.773	1.65 (0.90–3.01)	.104
Improved quality of patient care (eg, diagnostics, communication, and treatment)	1.52 (0.64–3.64)	.347	2.76 (1.44–5.28)	.002
<i>How often do you consider other cultural factors such as health beliefs, customs, and values:</i>				
When assessing your patients' medical needs?	1.06 (0.52–2.19)	.867	1.37 (0.69–2.74)	.368
When conducting health education with your patients?	0.81 (0.42–1.57)	.538	1.34 (0.69–2.60)	.387

Abbreviations: CC, cultural competency; LGBT, lesbian, gay, bisexual, and transgender; OR, odds ratio; CI: confidence interval.

^aReference group: no post-residency CC training.

Discussion

This study builds upon prior analyses of nationally representative CLAS data demonstrating associations between cultural competency training and physician characteristics, behaviors, and practice settings by providing disaggregated and multivariate analyses for training that addresses LGBT populations.^{5,8}

While differences in cultural competency training across physician specialties or practice regions have not been previously identified, our subgroup analyses show that surgical providers and those practicing in the South have significantly lower odds of receiving LGBT-specific training, a gap likely to widen in light of increasingly disparate policies and legislation affecting LGBT people and the training of health care providers across the US.^{8,9}

The care of LGBT patients is heavily impacted by health and healthcare disparities, and prior studies have shown that provider attitudes and perceptions of LGBT identities affect patient care outcomes and are modifiable by cultural competency training.^{4,10,11} Our results suggest a correlation between LGBT-specific cultural competency training and improved provider perceptions of patient satisfaction, comprehension, and quality of care. Interestingly, no differences in these

outcomes were found between respondents who had cultural competency training not specific to LGBT communities and those who reported no form of post-residency training. This has several implications for the assessment of cultural competency training, not least the potential confounding influence of curricular content received as a trainee on the pursuit of CME in topics not ubiquitously included in medical curricula, such as LGBT health. Additionally, evaluating cultural competency training as a conglomerate is difficult and may mask meaningful health outcomes findings. As the concept of cultural competency is complex with distinct aims across topics and populations addressed, there is immense heterogeneity in training types and outcomes of interest.¹² Future research should consider an evaluation approach that focuses on specific communities or issues, and explore measures beyond self-report.

Major limitations of the study included the high nonresponse rate, vulnerability to social desirability bias given the focus on provider perceptions, and limited assessment of concepts such as patient satisfaction and quality of care, which were not further defined in the survey. There is a clear need for updated national data that details the content and quantity

of cultural competency training. Given the sample size, data saturation may not have been reached for the study, and a power analysis was not performed.

Conclusions

Novel analyses of a national dataset reveal disparities in LGBT cultural competency training acquisition and demonstrate an association with improved provider perceptions of patient-centered outcomes. Our work highlights opportunities to improve the assessment of future interventions, and, importantly, supports a call to standardize CME in LGBT health.

Author Contributions

All authors contributed to the study design. EH and NR performed data analysis and initial manuscript drafting. All authors contributed to manuscript revisions and approved the final draft.

Data Availability

The datasets analyzed during the current study are available in the Centers for Disease Control repository (https://www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm).

Ethical Considerations and Consent to Participate

Our institution does not require ethical approval for de-identified, publicly available data as defined by the US federal regulations summarized in 45 CFR 46.102(e), thus this study does not require Institutional Review Board oversight. Informed consent was not required for the information presented in this article given the use of Centers for Disease Control data made publicly available for public health research, and per the ethical considerations above.

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Supplemental Material

Supplemental material for this article is available online.

REFERENCES

1. The Joint Commission. Advancing effective communication, cultural competence, and patient-and-family-centered care for the lesbian, gay, bisexual and transgender (LGBT) community. Published online October 2011.
2. Bonvicini KA. LGBT healthcare disparities: what progress have we made? *Patient Educ Couns*. 2017;100(12):2357-2361.
3. Khalili J, Leung LB, Diamant AL. Finding the perfect doctor: identifying lesbian, gay, bisexual, and transgender-competent physicians. *Am J Public Health*. 2015;105(6):1114-1119.
4. Yu H, Flores DD, Bonett S, Bauermeister JA. LGBTQ+ cultural competency training for health professionals: a systematic review. *BMC Med Educ*. 2023;23(1):558.
5. Mainous AG, Xie Z, Yadav S, Williams M, Blue AV, Hong YR. Physician cultural competency training and impact on behavior: evidence from the 2016 national ambulatory medical care survey. *Fam Med*. 2020;52(8):562-569.
6. NAMCS/NHAMCS – Questionnaires, datasets, and related documentation. November 5, 2023. Accessed 29 January 2024. https://www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm
7. von Elm E, Altman DG, Egger M, et al. The strengthening the reporting of observational studies in epidemiology (STROBE) statement: guidelines for reporting observational studies. *Ann Intern Med*. 2007;147(8):573-577.
8. Adigun AC, Qu H, Austin S. Is type of practice setting associated with physician's cultural competency training? Analysis from the National Ambulatory Medical Care Survey. *Health Educ Res*. 2021;36(1):1-8.
9. Movement Advancement Project | Snapshot: LGBTQ equality by state. Accessed 4 July 2024. <https://www.lgbtmap.org/equality-maps>
10. Bristol S, Kostelec T, MacDonald R. Improving emergency health care workers' knowledge, competency, and attitudes toward lesbian, gay, bisexual, and transgender patients through interdisciplinary cultural competency training. *J Emerg Nurs*. 2018;44(6):632-639.
11. Rhoten B, Burkhalter JE, Joo R, et al. Impact of an LGBTQ cultural competence training program for providers on knowledge, attitudes, self-efficacy, and intentions. *J Homosex*. 2022;69(6):1030-1041.
12. Jongen C, McCalman J, Bainbridge R. Health workforce cultural competency interventions: a systematic scoping review. *BMC Health Serv Res*. 2018;18(1):232.