An Analysis of LGBTQ Curricular Inclusion: A National Study of Physician Assistant Programs

Quinnette Jones, MSW, MHS, PA-C
Heather Batchelder, MA, LPA, HSP-PA;
Mara Sanchez, MMS, RD, PA-C;
Joanne Rolls, MEHP, MPAS, PA-C

Duke Family Medicine & Community Health
Duke University School of Medicine

Disclosures

The authors do not have any disclosures to report

Acknowledgements

The authors would like to acknowledge the PAEA's Support to Advance Research (STAR) program which supported collection of this data in addition to the AAPA-PAEA Research Fellowship program for ongoing research support.

Background

- Increasing numbers of people in the US who openly identify at LGBTQ+
  - 7.2% of adults in 2022
  - 19.2% of Generation Z (born 1997-2004)
  - 11.2% of Millennials (born 1981-1996)
- PAs can expect increased numbers of patients, students, & colleagues who identify as LGBTQ+
- LGBTQ+ Health Disparities
  -discrimination & stigmatization in healthcare
  -avoidance or delay of care
  -increased risk for:
  - SUD, mental health diagnoses
  -cardiovascular diseases, cancers, obesity, STIs

Educational Initiatives

- AAMC established suggested competencies for medical students in 2014
  - 30 competencies, 8 domains, not required
- ARC-PA standards 2019
  - Specific mention of sexual orientation & gender identity as instructional areas
  - No comparable standards for nursing or MD programs
- NCCPA 2019
  - "knowledge of human sexuality & gender identity, gender transition, & associated medical issues"

Prior Research

- Obedin-Maliver (2011)- US & Canadian medical schools
  - Median # of hours on LGBT content was 5
  - 3.8% reported 0 hours
- Seaborne et al (2015)-US PA programs
  - 59% response rate
  - Sexual orientation, gender identity, and STIs most frequently covered topics
  - Trans health least covered

Prior Research

- Rolls et al (2020) – US PA programs
  - 85.6% of programs taught 1 or more hours of transgender health, 14.4% did not cover
  - Most content in medical interviewing (44.1%) or women's health (31.4%)
  - Most common topics: sex/gender & identity/orientation (78.8%), health disparities (77.5%), & barriers to care (75.0%)
  - Barriers: lack of time (51.3%), faculty knowledge (35.6%)

Purpose

- To describe the delivery of LGBTQ content in PA education through a national survey of programs

Methods

- Developed 10 item survey tool (# hours by identity, courses, graduate preparedness, content importance, whether content was aligned with mission)
- 10 questions included in 2021 national program survey (n=284)
- Programs in all 4 US Census Bureau regions (Northeast, n=78; Midwest, n=65; South, n=101, West, n=39)
- PAEA followed up with non-responders by phone & email until 1/2022
- Descriptive analysis of trends

Results

- Survey response rate 71.8% (n=204)
- 80.88% report content integrated throughout rather than taught as discrete unit
- 64.71% report faculty member who is knowledge about LGBTQ health
- 11.76% of programs with faculty member practicing in LGBTQ health

Results

Teaching LGBTQ curricula aligns with values/mission institution

No	9 (4.41%)
Yes	167 (81.86%)
Unsure	19 (9.31%)
Missing	9 (4.41%)

Preparedness to Care for Patients from the LGBTQ population

Not at all prepared	1 (0.49%)
Minimally prepared	66 (32.35%)
Adequately prepared	113 (55.39%)
Very well prepared	11 (5.39%)
Missing	13 (6.37%)

Importance of Including LGBTQ Content in PA Curriculum

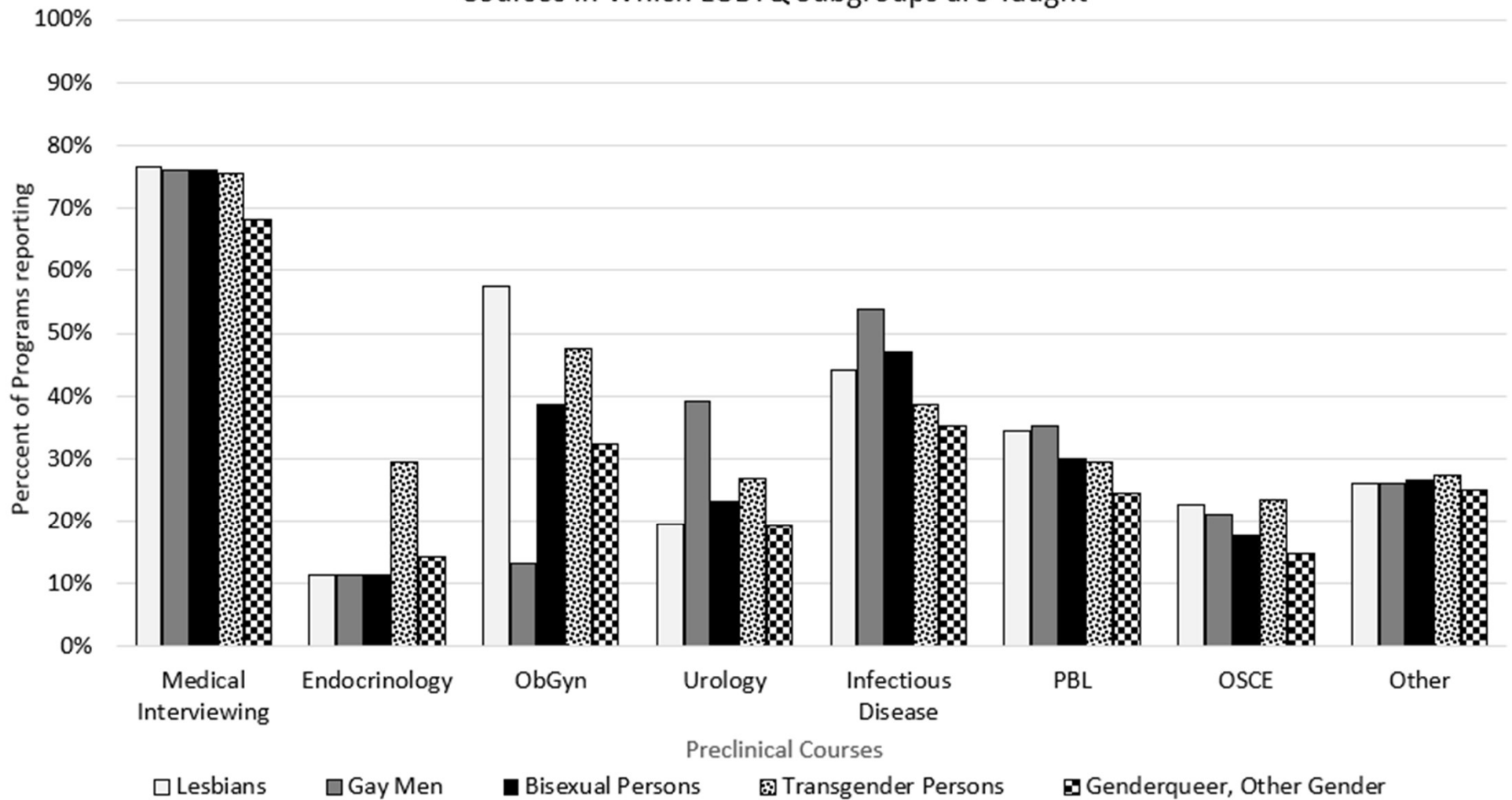|	
Very unimportant	1 (0.49%)
Somewhat unimportant	4 (1.96%)
Neutral	17 (8.33%)
Somewhat important	51 (25.00%)
Very important	120 (58.82%)
Missing	11 (5.39%)

Results

Number of Preclinical Hours Taught by LGBTQ Subgroup & Region
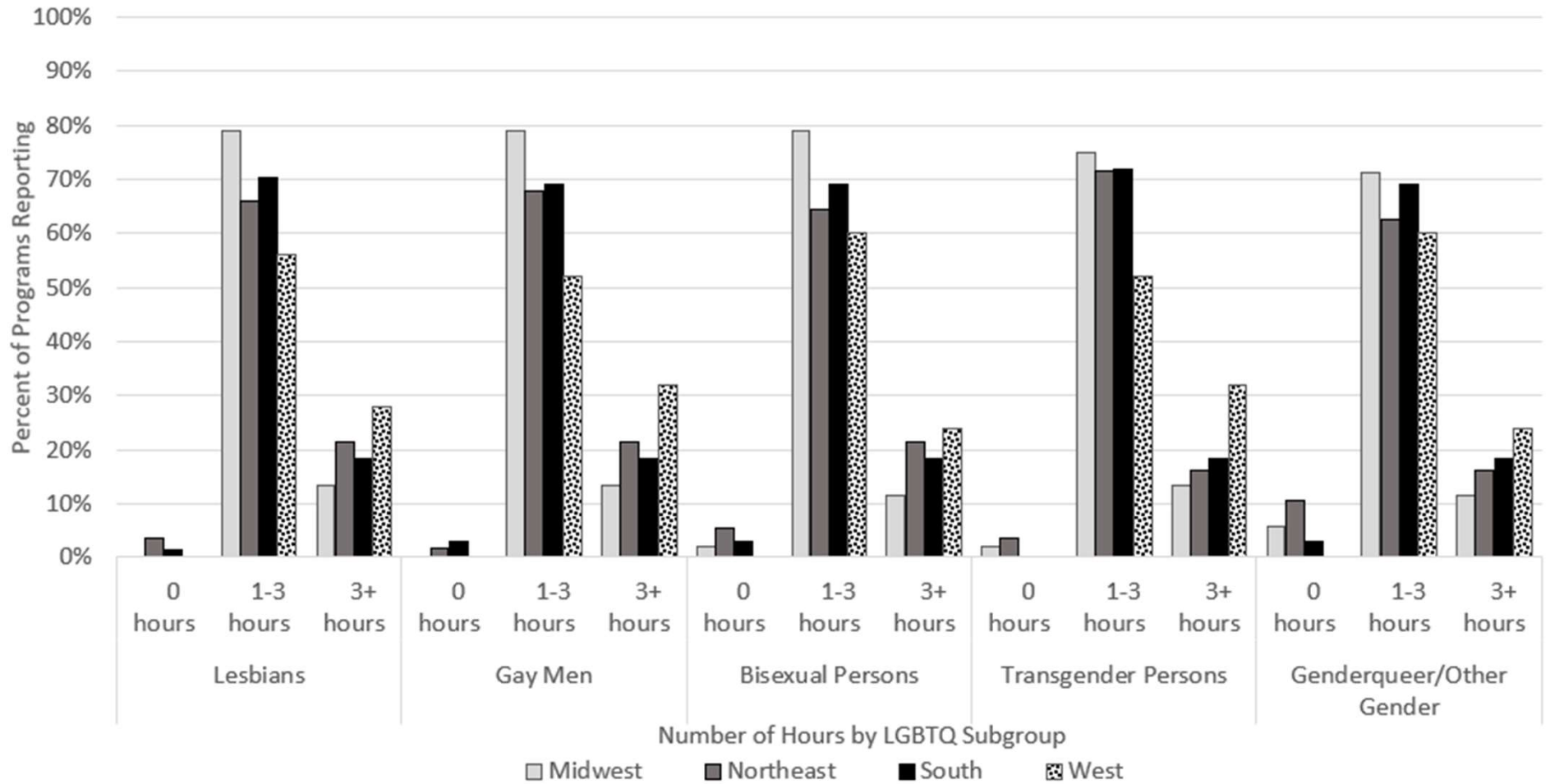
Results

Courses in Which LGBTQ Subgroups are Taught

Results

- Majority of programs with no clinical rotation focused on care of LGBTQ patients (71.6%, n=146)

- Of those with clinical rotations, 11.76% reported electives, 2.45% reported part of required rotation

- Electives reported: FM, IM, LGBTQ health or trans health, ID/HIV clinics

Discussion

-81% of programs integrating content throughout curriculum

-Improvements in transgender health coverage since 2018 (44.1%) versus 75.49% now in medical interviewing

-Impact of accreditation standards?

Strengths & Limitations

Strengths:

- 71.8% response rate

- Data breadth

Limitations:

- Surveys completed by Program Directors

- Did not evaluate intersex

Conclusions

- Areas for growth:
  - Clinical rotations
  - Assessment of student knowledge/skills

Questions

Quinnette Jones

Quinnette.jones@duke.edu

References

- **References**
- 1. Jones J. U.S. LGBT Identification Steady at 7.2%. Gallup.com. Published February 22, 2023. Accessed June 21, 2023. https://news.gallup.com/poll/470708/lgbt-identification-steady.aspx
- 2. Ayhan CHB, Bilgin H, Uluman OT, Sukut O, Yilmaz S, Buzlu S. A Systematic Review of the Discrimination Against Sexual and Gender Minority in Health Care Settings. *Int J Health Serv Plan Adm Eval*. 2020;50(1):44-61. doi:10.1177/0020731419885093
- 3. Gonzales G, Henning-Smith C. Health Disparities by Sexual Orientation: Results and Implications from the Behavioral Risk Factor Surveillance System. *J Community Health*. 2017;42(6):1163-1172. doi:10.1007/s10900-017-0366-z
- 4. Patterson CJ, Sepúlveda MJ, White J, eds. *Understanding the Well-Being of LGBTQI+ Populations*. National Academies Press; 2020. doi:10.17226/25877
- 5. Haas AP, Herman JL. Suicide Attempts among Transgender and Gender Non-Conforming Adults. *UCLA Williams Inst*. Published online 2014. Accessed October 20, 2023. https://escholarship.org/uc/item/8xg8061f
- 6. Morris M, Cooper RL, Ramesh A, et al. Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC Med Educ*. 2019;19(1):325. doi:10.1186/s12909-019-1727-3
- 7. Rolls J, Davis J, Backman R, Wood T, Honda T. Curricular Approaches to Transgender Health in Physician Assistant Education. *Acad Med*. 2020;95(10):1563-1569. doi:10.1097/ACM.0000000000003464
- 8. Jones Q, Sanchez M, Hibbard S. Coming Out, Getting Comfortable: Lesbian, Gay, Bisexual, Transgender, Queer, Plus Inclusion and Curricular Considerations. *J Physician Assist Educ Off J Physician Assist Educ Assoc*. 2020;31(2):103-107. doi:10.1097/JPA.0000000000000307
- 9. Association of American Medical Colleges. Implementing Curricular and INstituational Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD. Published online 2014. Accessed April 13, 2016. www.aamc.org/publications
- 10. Standards of Accreditation. ARC-PA. Accessed February 15, 2019. http://www.arc-pa.org/accreditation/standards-of-accreditation/
- 11. Rolls J, Showstark M, Jones Q, Bruessow D, Kluznik J. Promising Practices in Sexual Orientation and Gender Identity Curriculum Inclusion. *J Physician Assist Educ Off J Physician Assist Educ Assoc*. 2022;33(4):346-351. doi:10.1097/JPA.0000000000000475
- 12. Eickhoff C. Identifying Gaps in LGBTQ Health Education in Baccalaureate Undergraduate Nursing Programs. *J Nurs Educ*. 2021;60(10):552-558. doi:10.3928/01484834-20210729-01

- 13. Dauvrin M, Lorant V. Leadership and cultural competence of healthcare professionals: a social network analysis. *Nurs Res*. 2015;64(3):200-210. doi:10.1097/NNR.0000000000000092
- 14. Sawning S, Steinbock S, Croley R, Combs R, Shaw A, Ganzel T. A First Step in Addressing Medical Education Curriculum Gaps in Lesbian-, Gay-, Bisexual-, and Transgender-Related Content: The University of Louisville Lesbian, Gay, Bisexual, and Transgender Health Certificate Program. *Educ Health*. 2017;30(2):108. doi:10.4103/efh.EfH_78_16
- 15. Wahlen R, Bize R, Wang J, Merglen A, Ambresin AE. Medical students' knowledge of and attitudes towards LGBT people and their health care needs: Impact of a lecture on LGBT health. *PLoS ONE*. 2020;15(7):e0234743. doi:10.1371/journal.pone.0234743
- 16. Streed CGJ, Lunn MR, Siegel J, Obedin-Maliver J. Meeting the Patient Care, Education, and Research Missions: Academic Medical Centers Must Comprehensively Address Sexual and Gender Minority Health. *Acad Med*. 2021;96(6):822. doi:10.1097/ACM.0000000000003703
- 17. Seaborne LA, Prince RJ, Kushner DM. Sexual health education in U.S. physician assistant programs. *J Sex Med*. 2015;12(5):1158-1164. doi:10.1111/jsm.12879
- 18. PAEA. PAEA. Published September 18, 2023. Accessed September 20, 2023. https://paeaonline.org/
- 19. StataCorp LLC. Stata. Accessed November 16, 2023. https://www.stata.com/company/
- 20. US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2030. Accessed April 26, 2022. https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/discrimination
- 21. Gibson AW, Gobillot TA, Wang K, et al. A Novel Curriculum for Medical Student Training in LGBTQ Healthcare: A Regional Pathway Experience. *J Med Educ Curric Dev*. 2020;7:2382120520965254. doi:10.1177/2382120520965254
- 22. National Center for Health Statistics. 2020 LHI Topics. HealthyPeople.gov. Accessed May 28, 2019. https://www.healthypeople.gov/2020/leading-health-indicators/2020-LHI-Topics
- 23. Harkins T, Thomas J, Fontenot B, et al. Utilization and Workforce Integration of Physician Assistants. *J Nurs Interprofessional Leadersh Qual Saf*. 2022;4(1). https://digitalcommons.library.tmc.edu/uthoustonjqualsafe/vol4/iss1/6
- 24. Attacks on Gender-Affirming and Transgender Health Care | ACP Online. Published April 24, 2023. Accessed June 29, 2023. https://www.acponline.org/advocacy/state-health-policy/attacks-on-gender-affirming-and-transgender-health-care

Program Information	Total n (%) (n=204)	Midwest n (%) (n=52)	Northeast n (%) (n=56)	South n (%) (n=71)	West n (%) (n=25)
Rurality					
Urban	177 (86.76%)	44 (84.62%)	49 (87.50%)	60 (84.51%)	24 (96.00%)
Rural	27 (13.24%)	8 (15.38%)	7 (12.50%)	11 (15.49%)	1 (4.00%)
Institution Type					
Public	135 (66.18%)	36 (69.23%)	45 (80.36%)	40 (56.34%)	14 (56.00%)
Private	64 (31.37%)	16 (30.77%)	10 (17.86%)	28 (39.44%)	10 (40.00%)
Public-Private Hybrid	5 (2.45%)	0 (0.00%)	1 (1.79%)	3 (4.23%)	1 (4.00%)
Academic Health Center (AHC) Sponsored					
No	143 (70.10%)	38 (73.08%)	45 (80.36%)	42 (59.15%)	18 (72.00%)
Yes	61 (29.90%)	14 (26.92%)	11 (19.64%)	29 (40.85%)	7 (28.00%)
Faculty, Staff, & Program Characteristics					
Faculty member knowledgeable in caring from patients who identify as LGBTQ	132 (64.71%)	31 (59.62%)	41 (73.21%)	44 (61.97%)	16 (64.00%)
Faculty member(s) who identifies as LGBTQ	52 (25.49%)	10 (19.23%)	18 (32.14%)	14 (19.72%)	10 (40.00%)
Staff member(s) who identifies as LGBTQ	13 (6.37%)	4 (7.69%)	1 (1.79%)	2 (2.82%)	6 (24.00%)
Faculty clinically practicing in LGBTQ health	24 (11.76%)	5 (9.62%)	9 (16.07%)	5 (7.04%)	5 (20.00%)
Faculty conducting research in LGBTQ care/health	13 (6.37%)	2 (3.85%)	5 (8.93%)	5 (7.04%)	1 (4.00%)
Gender neutral restroom for use by PA program students, faculty, staff, and visitors.	86 (42.16%)	29 (55.77%)	25 (44.64%)	18 (25.35%)	14 (56.00%)
Mechanisms to include pronouns in any official identification/name badge/learning management system	121 (59.31%)	38 (73.08%)	39 (69.64%)	29 (40.85%)	15 (60.00%)
Public facing materials or information about LGBTQ inclusion (i.e. safe space or affinity group information on website)	96 (47.06%)	32 (61.54%)	25 (44.64%)	25 (35.21%)	14 (56.00%)
Other	7 (3.43%)	2 (3.85%)	2 (3.57%)	3 (4.23%)	0 (0.00%)

Teaching LGBTQ curricula aligns with values/mission institution					
No	9 (4.41%)	1 (1.92%)	2 (3.57%)	5 (7.04%)	1 (4.00%)
Yes	167 (81.86%)	43 (82.69%)	49 (87.50%)	55 (77.46%)	20 (80.00%)
Unsure	19 (9.31%)	5 (9.62%)	4 (7.14%)	7 (9.86%)	3 (12.00%)
Missing	9 (4.41%)	3 (5.77%)	1 (1.79%)	4 (5.63%)	1 (4.00%)
Preparedness to Care for Patients from the LGBTQ population					
Not at all prepared	1 (0.49%)	0 (0.00%)	0 (0.00%)	1 (1.41%)	0 (0.00%)
Minimally prepared	66 (32.35%)	22 (42.31%)	15 (26.79%)	21 (29.58%)	8 (32.00%)
Adequately prepared	113 (55.39%)	25 (48.08%)	36 (64.29%)	39 (54.93%)	13 (52.00%)
Very well prepared	11 (5.39%)	1 (1.92%)	4 (7.14%)	4 (5.63%)	2 (8.00%)
Missing	13 (6.37%)	4 (7.69%)	1 (1.79%)	6 (8.45%)	2 (8.00%)
Importance of Including LGBTQ Content in PA Curriculum					
Very unimportant	1 (0.49%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (4.00%)
Somewhat unimportant	4 (1.96%)	0 (0.00%)	1 (1.79%)	3 (4.23%)	0 (0.00%)
Neutral	17 (8.33%)	1 (1.92%)	2 (3.57%)	10 (14.08%)	4 (16.00%)
Somewhat important	51 (25.00%)	24 (46.15%)	14 (25.00%)	11 (15.49%)	2 (8.00%)
Very important	120 (58.82%)	24 (46.15%)	38 (67.86%)	42 (59.15%)	16 (64.00%)
Missing	11 (5.39%)	3 (5.77%)	1 (1.79%)	5 (7.04%)	2 (8.00%)

Table 2. Delivery of LGBTQ Content by Method, Preclinical Course, and LGBTQ Subgroup, Overall and by Region

Preclinical Year	Total n (%) (n=204)	Region			
		Midwest n (%) (n=52)	Northeast n (%) (n=56)	South n (%) (n=71)	West n (%) (n=25)
During the Preclinical Year, how is LGBTQ content delivered?					
Integrated throughout the preclinical/didactic curriculum	165 (80.88%)	40 (76.92%)	46 (82.14%)	61 (85.92%)	18 (72.00%)
Taught as a discrete LGBTQ unit	27 (13.24%)	6 (11.54%)	11 (19.64%)	7 (9.86%)	3 (12.00%)
Taught within a single course	30 (14.71%)	6 (11.54%)	9 (16.07%)	8 (11.27%)	7 (28.00%)
Unsure	6 (2.94%)	2 (3.85%)	2 (3.57%)	1 (1.41%)	1 (4.00%)
Preclinical Course x LGBTQ Subgroup					
Medical Interviewing					
Lesbians	156 (76.47%)	43 (82.69%)	43 (76.79%)	53 (74.65%)	17 (68.00%)
Gay Men	155 (75.98%)	42 (80.77%)	43 (76.79%)	53 (74.65%)	17 (68.00%)
Bisexual persons	155 (75.98%)	43 (82.69%)	43 (76.79%)	52 (73.24%)	17 (68.00%)
Transgender persons	154 (75.49%)	42 (80.77%)	42 (75.00%)	53 (74.65%)	17 (68.00%)
Genderqueer/other gender persons	139 (68.14%)	38 (73.08%)	37 (66.07%)	47 (66.20%)	17 (68.00%)
Endocrinology					
Lesbians	23 (11.27%)	6 (11.54%)	5 (8.93%)	8 (11.27%)	4 (16.00%)
Gay Men	23 (11.27%)	6 (11.54%)	6 (10.71%)	8 (11.27%)	3 (12.00%)
Bisexual persons	23 (11.27%)	7 (13.46%)	5 (8.93%)	8 (11.27%)	3 (12.00%)
Transgender persons	60 (29.41%)	17 (32.69%)	16 (28.57%)	19 (26.76%)	8 (32.00%)
Genderqueer/other gender persons	29 (14.22%)	9 (17.31%)	7 (12.50%)	8 (11.27%)	5 (20.00%)
Women's Health/OBGYN					
Lesbians	117 (57.35%)	32 (61.54%)	30 (53.57%)	41 (57.75%)	14 (56.00%)
Gay Men	27 (13.24%)	9 (17.31%)	6 (10.71%)	6 (8.45%)	6 (24.00%)
Bisexual persons	79 (38.73%)	20 (38.46%)	19 (33.93%)	29 (40.85%)	11 (44.00%)
Transgender persons	97 (47.55%)	25 (48.08%)	23 (41.07%)	35 (49.30%)	14 (56.00%)

Genderqueer/other gender persons	66 (32.35%)	17 (32.69%)	17 (30.36%)	22 (30.99%)	10 (40.00%)
Urology					
Lesbians	40 (19.61%)	11 (21.15%)	7 (12.50%)	12 (16.90%)	10 (40.00%)
Gay Men	80 (39.22%)	18 (34.62%)	26 (46.43%)	25 (35.21%)	11 (44.00%)
Bisexual persons	47 (23.04%)	11 (21.15%)	11 (19.64%)	15 (21.13%)	10 (40.00%)
Transgender persons	55 (26.96%)	14 (26.92%)	16 (28.57%)	15 (21.13%)	10 (40.00%)
Genderqueer/other gender persons	39 (19.12%)	10 (19.23%)	9 (16.07%)	10 (14.08%)	10 (40.00%)
Infectious Disease					
Lesbians	90 (44.12%)	24 (46.15%)	27 (48.21%)	26 (36.62%)	13 (52.00%)
Gay Men	110 (53.92%)	31 (59.62%)	34 (60.71%)	29 (40.85%)	16 (64.00%)
Bisexual persons	96 (47.06%)	25 (48.08%)	29 (51.79%)	26 (36.62%)	16 (64.00%)
Transgender persons	79 (38.73%)	22 (42.31%)	22 (39.29%)	22 (30.99%)	13 (52.00%)
Genderqueer/other gender persons	72 (35.29%)	18 (34.62%)	20 (35.71%)	22 (30.99%)	12 (48.00%)
Within Problem-Based Learning Cases					
Lesbians	70 (34.31%)	20 (38.46%)	22 (39.29%)	22 (30.99%)	6 (24.00%)
Gay Men	72 (35.29%)	20 (38.46%)	23 (41.07%)	23 (32.39%)	6 (24.00%)
Bisexual persons	61 (29.90%)	19 (36.54%)	17 (30.36%)	20 (28.17%)	5 (20.00%)
Transgender persons	60 (29.41%)	15 (28.85%)	21 (37.50%)	20 (28.17%)	4 (16.00%)
Genderqueer/other gender persons	50 (24.51%)	15 (28.85%)	16 (28.57%)	15 (21.13%)	4 (16.00%)
Via OSCEs or Simulation					
Lesbians	46 (22.55%)	13 (25.00%)	14 (25.00%)	16 (22.54%)	3 (12.00%)
Gay Men	43 (21.08%)	12 (23.08%)	13 (23.21%)	14 (19.72%)	4 (16.00%)
Bisexual persons	36 (17.65%)	11 (21.15%)	10 (17.86%)	12 (16.90%)	3 (12.00%)
Transgender persons	48 (23.53%)	14 (26.92%)	16 (28.57%)	13 (18.31%)	5 (20.00%)
Genderqueer/other gender persons	30 (14.71%)	9 (17.31%)	8 (14.29%)	10 (14.08%)	3 (12.00%)
Other Courses					
Lesbians	53 (25.98%)	15 (28.85%)	15 (26.79%)	16 (22.54%)	7 (28.00%)
Gay Men	53 (25.98%)	15 (28.85%)	15 (26.79%)	16 (22.54%)	7 (28.00%)
Bisexual persons	54 (26.47%)	15 (28.85%)	15 (26.79%)	17 (23.94%)	7 (28.00%)
Transgender persons	56 (27.45%)	15 (28.85%)	15 (26.79%)	19 (26.76%)	7 (28.00%)
Genderqueer/other gender persons	51 (25.00%)	13 (25.00%)	15 (26.79%)	16 (22.54%)	7 (28.00%)

CME Self-Assessment

The percentage of adults in the US who identify as lesbian, gay, bisexual, transgender, or genderqueer (LGBTQ) is currently which of the following:

a. 1%

b. 4%

c. 7%

d. 13%

CME Self-Assessment

The percentage of adults in the US who identify as lesbian, gay, bisexual, transgender, or genderqueer (LGBTQ) is which of the following:

a. 1%

b. 4%

c. 7%

d. 13%

7.2% of adults currently identify as LGBTQ according to a 2022 poll.

CME Self-Assessment

Which of the following professions have current accreditation standards that specifically require instruction on gender identity and sexual orientation? Mark all that apply:

a. Dental

b. Medicine (MD, DO)

c. Nursing

d. Physician Assistant

CME Self-Assessment

Which of the following professions have current accreditation standards that specifically require instruction on gender identity and sexual orientation? Mark all that apply:

a. Dental

b. Medicine (MD, DO)

c. Nursing

d. Physician Assistant

PA is the only profession noted above with current accreditation standards specifically requiring this content.

CME Self-Assessment

According to the research presented in this session, what percent of PA programs report their graduates are very well prepared to care for LGBTQ+ patients?

a. 1%

b. 5%

c. 7%

d. 13%

CME Self-Assessment

According to the research presented in this session, what percent of PA programs report their graduates are very well prepared to care for LGBTQ+ patients?

a. 1%

b. 5%

c. 7%

d. 13%

Only 5.4% of programs reported graduates are extremely well prepared to care for LGBTQ patients.

CME Self-Assessment

Which course is most frequently reported by PA programs to include LGBTQ content?

a. Endocrinology

b. Obstetrics & Gynecology

c. Medical Interviewing

d. Urology

CME Self-Assessment

Which course is most frequently reported by PA programs to include LGBTQ content?

a. Endocrinology

b. Obstetrics & Gynecology

c. Medical Interviewing

d. Urology

~70% of programs report including content on lesbians, gay men, bisexual, transgender, and genderqueer people in medical interviewing courses.