College of Medicine
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LGBTQIA+ Healthcare: Comparing Competency, Comfortability, and Career Planning Among Incoming LGBTQIA+ and Non-LGBTQIA+ Medical Students

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BACKGROUND

Historically, medicine has been hostile to LGBTIQA+ patients, students, & physicians.

- **In national exit surveys, LGB medical students report being targeted for abusive behavior more frequently** than heterosexual medical students (43.5%, 23.6%).[1]
- **2/3 of LGBTQIA+ physicians report hearing biased/disparaging remarks about LGBTQIA+ people** while practicing medicine.[2]
- Some specialties (e.g. general surgery) are perceived as non-inclusive of LGBTQIA+ physicians. **57% of surgery residents report concealing their sexual orientation from fellow residents owing to fear of rejection.**[3]
- Medical schools spend **less than 8 hours across 4 years** on LGBTQIA+-related health topics on average.[4]
- Little research has been done to characterize early career preferences, clinical competency, & motivations of LGBTQIA+ medical students upon entering medical school.

PAIRED RESEARCH & ADVOCACY PROJECT DESIGN

A 3-PART LOCAL MOVEMENT BY UARIZONA MEDICAL STUDENTS

1. Curriculum Assessment. 600 lectures were systematically audited by trained student researchers for non-inclusive language, existing LGBTQIA+ content, and possible places for curricular enrichment with LGBTQIA+ health topics. A student committee reviewed assessments and created a packet of recommendations for faculty.

2. Advocacy for Inclusion. Through the student interest group *MedPride at UACOM-T,* the team rallied students and faculty, planned the project, and streamlined training. They met weekly to discuss findings, review research supporting suggested amendments, and strategize about how to improve LGBTQIA+ healthcare education.

The present study is part of this aim → 3. Student Survey. In addition to identity questions, four areas of LGBTQIA+ healthcare were chosen for assessment, alongside other topics in the survey about medical education and medical training. Chi-squared tests compared responses from LGBTQIA+-identifying and non-LGBTQIA+-identifying student populations to determine trends and preferences of LGBTIQA+ students.

- **KNOWLEDGE:** assessment of facts and understanding of concepts.
- **CLINICAL SKILLS:** interactions that meet professional competency standards.
- **SOCIETAL ATTITUDES:** perceptions of LGBTQ+ health & identity within society.
- **INDIVIDUAL COMFORT:** personal feelings around LGBTQ+ patients.

METHODOLOGY

In this study, an IRB-approved survey was developed by student researchers in collaboration with **Arizona Medical Education Research Initiative (AMERI)** for incoming medical students at the University of Arizona College of Medicine – Tucson during the first week of classes to assess gaps in LGBTQIA+ health knowledge to be addressed by modifications to the curriculum.

- 8 survey questions were added to the annual incoming class survey to record students' sex, sexual orientation, gender identity, baseline knowledge, skills, experience, & attitudes pertaining to LGBTQIA+ health to prioritize ongoing curricular change efforts.
- Responses from incoming classes of 2020 and 2021 were analyzed for topics in which LGBTQIA+ students responded differently than non-LGBTQIA+ students.

FINDINGS

Table 1. CLASS COMPOSITION

2020 Incoming Class (n=66)	2021 Incoming Class (n=114)
Sexual Orientation • 81% Heterosexual • 19% LGBTQIA+ includes: Bisexual, Gay/Lesbian, Questioning/Unsure, A sexual identity not listed (queer, asexual, pansexual) • 0% Decline to state	**Sexual Orientation** • 76% Heterosexual • 24% LGBTQIA+ includes: Bisexual, Gay/Lesbian, Questioning/Unsure, A sexual identity not listed (queer, asexual, pansexual) • 0% Decline to state
Gender Identity • 45.45% Woman • 41.94% Man • 1.61% Nonbinary	**Gender Identity** • 55.05% Woman • 44.04% Man • 0.92% Nonbinary
Assigned Sex at Birth • 56.67% Female • 43.33% Male • 0% Intersex	**Assigned Sex at Birth** • 50.05% Female • 44.95% Male • 0% Intersex

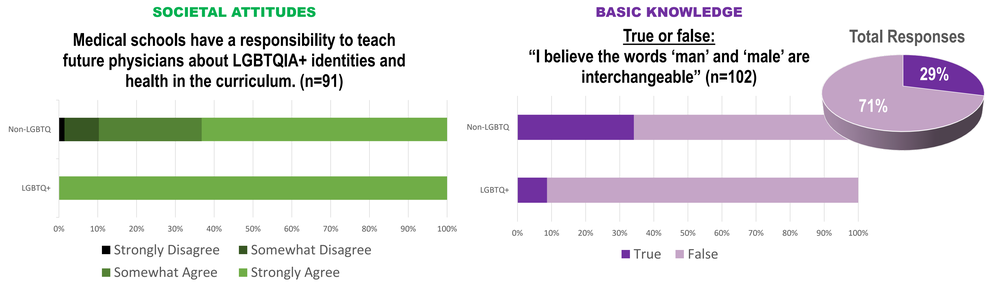
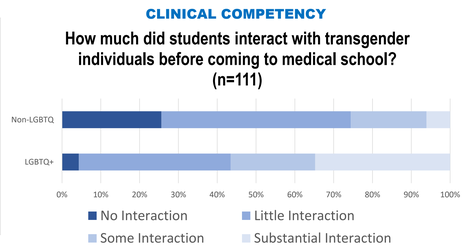


figure 1

Baseline knowledge. LGBTQIA+-identifying medical students enter medical school with more factual knowledge about gender/sexuality, more experience interacting with transgender people, and unanimous societal attitudes that education about LGBTQIA+ identities and health should be included in the curriculum that trains future physicians.
There was no difference in reported confidence and comfortability interacting with LGBT patients as well as respectfully confirming and using pronouns (not shown).

Societal Attitudes. (x-squared = 9.2035, df = 3, p = 0.0267)
Basic Knowledge. (x- squared = 6.6696, df = 1, p = 0.03562)
Clinical Competency. (x-squared = 16.216, df = 3, p = 0.001024)



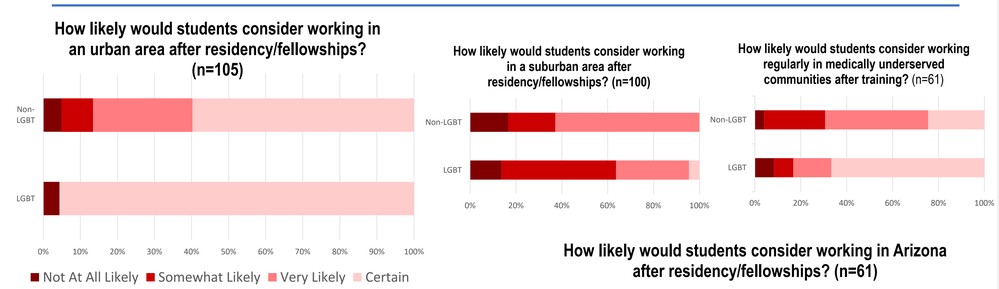
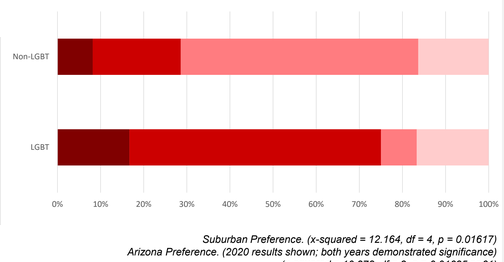


figure 2

Career location preference. LGBTQIA+-identifying medical students report with more certainty they would work in an urban area and work with medically underserved communities after training. They are less likely to consider working in suburban areas and in Arizona compared to non-LGBTQIA+ peers.

Urban Preference. (2021 results shown; both years demonstrated significance)
(x-squared = 13.187, df = 3, p = 0.004249 n=61).
(x-squared = 11.568, df = 3, p = 0.009022 n=105)



Suburban Preference. (x-squared = 12.164, df = 4, p = 0.01617)
Arizona Preference. (2020 results shown; both years demonstrated significance)
(x-squared = 10.278, df = 3, p = 0.01635 n=61)
(x-squared = 12.76, df = 6, p = 0.04701 n=105)

ADDITIONAL FINDINGS

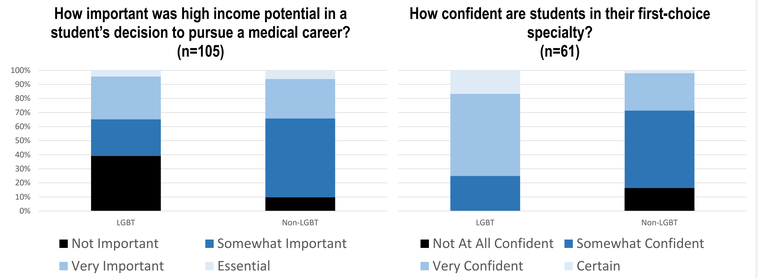


figure 3

Motivation and specialty choice. LGBTQIA+ medical students report high income potential was not important in their decision to pursue medicine and they have greater confidence in their first-choice specialties compared to non-LGBTQIA+-identifying peers.

Financial Potential. (x-squared = 12.971, df = 3, p = 0.004699)
Specialty Choice. (x-squared = 10.902, df = 3, p = 0.01227)

CONCLUSIONS

First-year LGBTQIA+-identifying medical students had significantly different responses than non-LGBTQIA+ peers to questions about baseline knowledge, experience, and attitudes of gender/sexuality. Post-residency/fellowship plans diverged in more certainty to commit to underserved patient populations, stronger preference of urban environments, less certainty about staying in Arizona to practice medicine, less financial inspiration to pursue a medical career, and greater specialty choice confidence.

Future research should address early career pressures and concerns that may influence career choices of LGBTQIA+ medical students. These could include political reasons, safety, whether students are "out", levels of support, and personal background. Additionally, further research is needed to track how LGBTQIA+ student career preferences might change or be influenced throughout training.

LIMITATIONS

Due to the COVID-19 pandemic, responses in 2020 were lower than expected (n=66 compared to n=114 in 2021). While our LGBTQIA+-focused questions did not change, other survey questions may have been modified or added between classes. Thus, trends must be regarded in these contexts. Additionally, not all students answered all questions (differing number in each question).

Our student population may have more LGBTQIA+ students than most U.S. medical schools. Graduate Questionnaire (GQ) surveys by the Association of American Medical Colleges report U.S. medical schools are comprised of 5-8% LGB medical students.[5] In contrast, 19-24% of medical students identify as LGBTQIA+ at UACOM-T. This could be an effect of more inclusive survey design as our survey included a write-in category in addition to identities outside of lesbian, gay, and bisexual. It could also be due to the amount of visible support available at UACOM-T and celebration of LGBTQIA+ students.

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