

## Introduction

- Anesthesiologists routinely assess preoperative, intraoperative, and postoperative status of patients undergoing surgery.
- When it comes to gender affirming surgery, the complexity of perioperative considerations increases with the biopsychosocial nuances that come with transgender patient care.
- Based on current day literature, what role do anesthesiologists play on the multidisciplinary care team in delivering holistic, sensitive care of transgender patients throughout the gender affirming surgery process, and how well equipped are they to do so?

## Objectives

- Review documented anesthetic concerns in the current literature
- Highlight any new guidelines on team dynamics used by institutions with multidisciplinary perioperative care teams
- Identify points of further education and research to improve transgender patient care standards and sensitivity

## Methods

- Review was conducted via PubMed literature search: ((transgender) AND (perioperative care)) AND (anesthesia), filtered by 2018-2024 (24 results). 4 suggested articles from Dr. Reece-Nguyen were added for a total of 28 articles.
- 8 Excluded: Specific single case study (1), Retrospective studies for specific pathology following gender affirming surgeries (3), Study on specific anesthetic procedure (1), Study focusing on population non-specific to LGBTQ+ (3)

## Review and Discussion

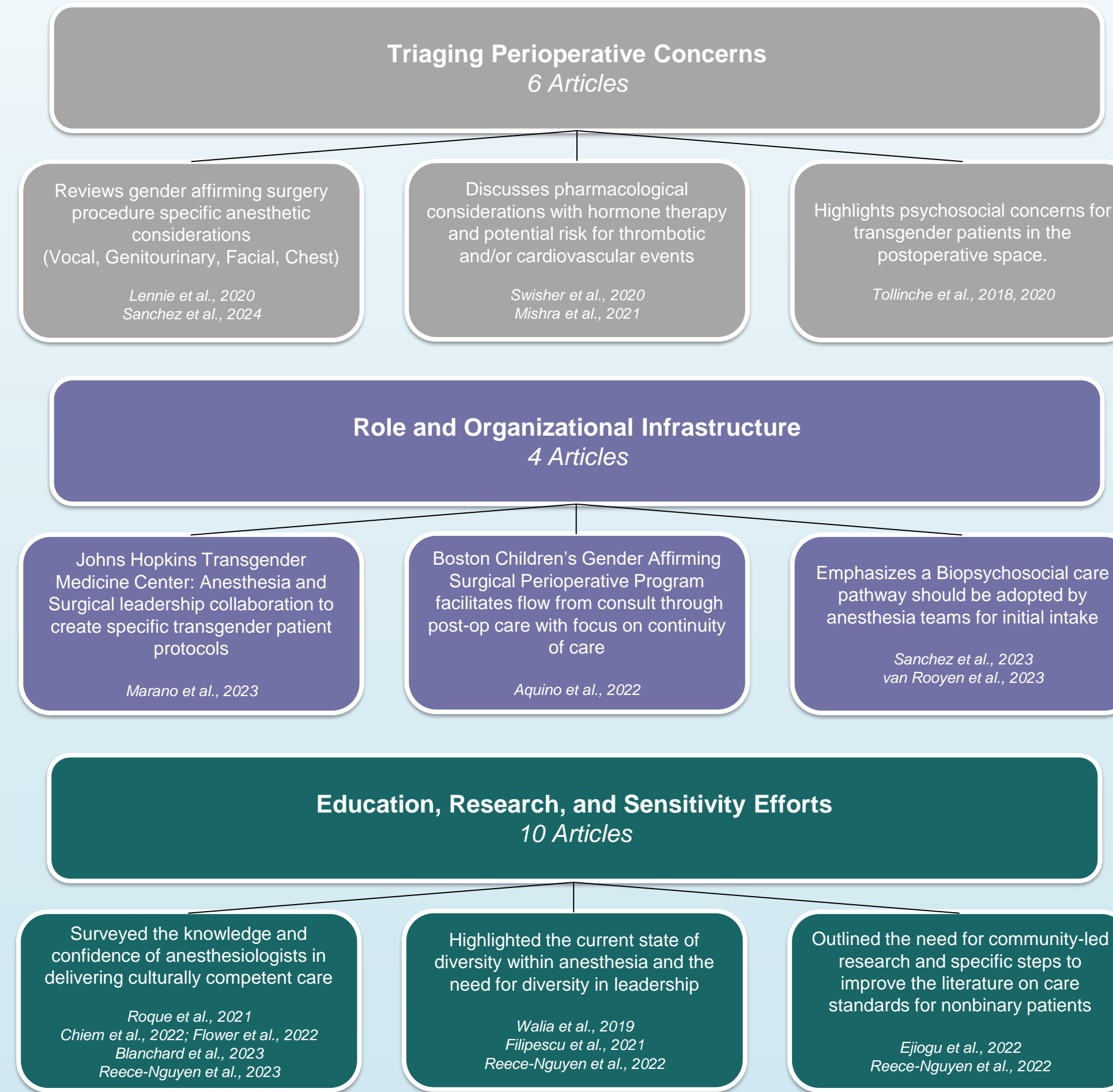


Figure 1. Graphic organizing reviewed literature on perioperative care for transgender patients into 3 identified objectives..



Figure 2. Flier from the Society of Pediatric Anesthesia for a mentoring program recruiting LGBTQIA+ physician mentors and medical student mentees.



Figure 3. The first research symposium of the Perioperative Anesthesiology Registry for Transgender Adults and Youth (PARTAY) formed in June 2023. Photo credit to Dr. Remigio Roque.

## Conclusions

- Pediatric anesthesia confidence in managing adolescents is low as of 2021
- Standard of care literature for transgender and nonbinary patients is scarce
- Establishing diverse leadership within anesthesia could also help with developing confidence
- Algorithms and structured communication is becoming a more commonly used approach in triaging concerns

## Future Directions

- Conducting more research projects that keeps logged information of procedures, such as the PARTAY registry for study of anesthetic concerns (DVT risks, PONV risk calculator, airway management)
- Forming pathways and/or specialty care teams to ensure thoroughness in consultation, operation, and continuity of care
- Consider training specific care teams for LGBTQ+ populations to enhance care and increase visibility of LGBTQ+ providers in leadership and mentorship efforts

## References

Aquino NJ, Boskey ER, Staffa SJ, Garon O, Cross AW, Gemmill KV, Cravero JP, Vassakova B. A Single Center Case Series of Gender-Affirming Surgeries and the Evolution of a Specialty Anesthesia Team. *J Clin Med*. 2022 Mar 31;11(7):1943. doi: 10.3390/jcm11071943. PMID: 35407551; PMCID: PMC9000168.

Sanchez K, J., Sanchez R, A., Ben Khalouf, B., & Ellis, D. B. (2023). Perioperative care of transgender and gender-diverse patients: A biopsychosocial approach. *Anesthesia & Analgesia*, 137(1), 204. <https://doi.org/10.1213/ANE.000000000000490>

Tollinche, L. E., Walters, C. B., Radt, A., Long, M., Galante, L., Goldstein, Z. G., Kapoor, Y., & Yeoh, C. (2018). The perioperative care of the transgender patient. *Anesthesia & Analgesia*, 127(2), 369. <https://doi.org/10.1213/ANE.0000000000003371>

Filipescu, D., & Stefan, M. (2021). Sex and gender differences in anesthesia: Relevant also for perioperative safety?. *Best practice & research. Clinical anaesthesiology*, 35(1), 141-153. <https://doi.org/10.1016/j.spa.2020.12.006>

Tollinche LE, Van Rooyen C, Alonso A, Fischer GW, Yeoh CB. Considerations for Transgender Patients Perioperatively. *Anesthesiol Clin*. 2020 Jun;38(2):311-320. doi: 10.1016/j.anc.2020.01.009. PMID: 32303686; PMCID: PMC7197463.

Blanchard E, Evans R, AbulFateh H, Brown M, Carter T, & LaChenaye J. (2023). Beliefs and Intentions of Anesthesia Physicians Toward Providing Culturally Competent Care to Transgender Patients. *Transgender health*, 8(6), 542-549. <https://doi.org/10.1089/trgh.2022.0041>

Ejiogu N. (2022). LGBTQ+ health and anesthesia for obstetric and gynecological procedures: Current opinion in anaesthesiology. *Anaesthesia*, 78 Suppl 4, 39-45. <https://doi.org/10.1111/anae.15406>

Roque, R. A., O'Reilly-Shah, V., Lorello, G. R., Adams, T., & Cladis, F. (2021). Transgender patient care: a prospective survey of pediatric anesthesiologist attitudes and knowledge. *Canadian journal of anaesthesiology*, 68(11), 1703-1705. <https://doi.org/10.1007/s12630-021-02089-w>

Couch, N. S., & Moynihan, M. K. (2021). Adolescent gynaecology: anaesthetic and peri-operative care implications. *Anaesthesia*, 78 Suppl 4, 39-45. <https://doi.org/10.1111/anae.15406>

Chiem, J., Liow, J., & Ewe, O. (2022). Diversity of anesthesia workforce - why does it matter?. *Current opinion in anaesthesiology*, 35(2), 208-214. <https://doi.org/10.1097/ACO.0000000000001113>

Shah, S. B., Khanna, P., Bhatt, R., Goyal, P., Gang, R., & Chawla, R. (2019). Perioperative anaesthetic concerns in transgender patients: Indian perspective. *Indian journal of anaesthesia*, 53(2), 84-91. <https://doi.org/10.4103/ija.545.19>

Walia, H., Banoub, R., Cambier, G. S., Rice, J., Tumin, J. D., & Raman, V. T. (2019). Perioperative Provider and Staff Competency in Providing Culturally Competent LGBTQ Healthcare in Pediatric Setting. *Advances in medical education and practice*, 10, 1097-1102. <https://doi.org/10.2147/AMEP.S220578>

Mishra, P., Naith, A., Kaulabi, A., & Kain, R. (2021). Gender reassignment surgery - a narrative overview of anaesthetic considerations and implications. *Anaesthesia intensive therapy*, 52(4), 343-348. <https://doi.org/10.5114/ait.2021.109448>

Swisher, J., Bletz, J., & Switzer, B. (2020). Special Considerations Related to Race, Sex, Gender, and Socioeconomic Status in the Preoperative Evaluation: Part 2: Sex Considerations and Homeless Patients. *Anesthesiology Clinics*, 38(2), 263-278. <https://doi.org/10.1016/j.anc.2020.02.001>

Lennie, Y., Leeming, K., & Eversed, L. (2020). Perioperative considerations for transgender women undergoing routine surgery: a narrative review. *British journal of anaesthesia*, 124(6), 702-711. <https://doi.org/10.1016/j.bja.2020.01.024>

Reece-Nguyen, T. L., Lee, H. H., Garcia-Marcinkiewicz, A. G., Szolnoki, J., Fernandez, A. M., Mukkamala, S., Lalwani, K., Deutsch, N., & Jimenez, N. (2023). Diversity, equity, and inclusion within the Society for Pediatric Anesthesia: A mixed methods assessment. *Pediatric anaesthesia*, 33(6), 435-445. <https://doi.org/10.1111/pan.14642>

Flower, L., & Edwardson, S. (2022). Peri-operative management of transgender patients: time for some guidance?. *Anaesthesia*, 77(11), 1313-1314. <https://doi.org/10.1111/anae.15819>

Marano, A. A., Noyes, M., Eisenbeis, L., Hedlin, H. F., Segna, K., Naira, P. M., Thomas, K., Lee, W. P. A., Redet, R. J., & Coon, D. (2023). Building an Academic Transgender Medicine Center of Excellence: The 5-Year Johns Hopkins Experience. *Academic medicine: journal of the Association of American Medical Colleges*, 98(5), 969-976. <https://doi.org/10.1097/ACM.0000000000000139>

van Rooyen, C., Aquino, N.J., Tollinche, L.E., Reece-Nguyen, T.L. Perioperative Considerations for Gender-Affirming Surgery. *Curr Anesthesiol Rep* 13, 90-98 (2023). <https://doi.org/10.1007/s40140-023-00553-5>

Reece-Nguyen TL, Tollinche L, Van Rooyen C, Roque RA. Current challenges faced by transgender and gender-diverse patients and providers in anaesthesiology. *Int Anesthesiol Clin*. 2023 Jan 1;61(1):26-33. doi: 10.1097/IAA.0000000000000384.

Sanchez K, Tollinche L, Reece-Nguyen T. Anesthesia for gender-affirming surgery: a practical review. *Curr Opin Anaesthesiol*. 2024 Feb 22. doi: 10.1097/ACO.0000000000000360.

Reece-Nguyen T, Alonso AM, Vinson AE, Burnout, Mental Health, and Workplace Discrimination in Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intense, and Asexual Anesthesiologists. *Anesthesiol Clin*. 2022 Jun;40(2):245-255. doi: 10.1016/j.anc.2022.01.002.