

Geographical Disparities and their Impact on Patient Follow-up Following Gender-Affirming Chest Masculinization Surgery

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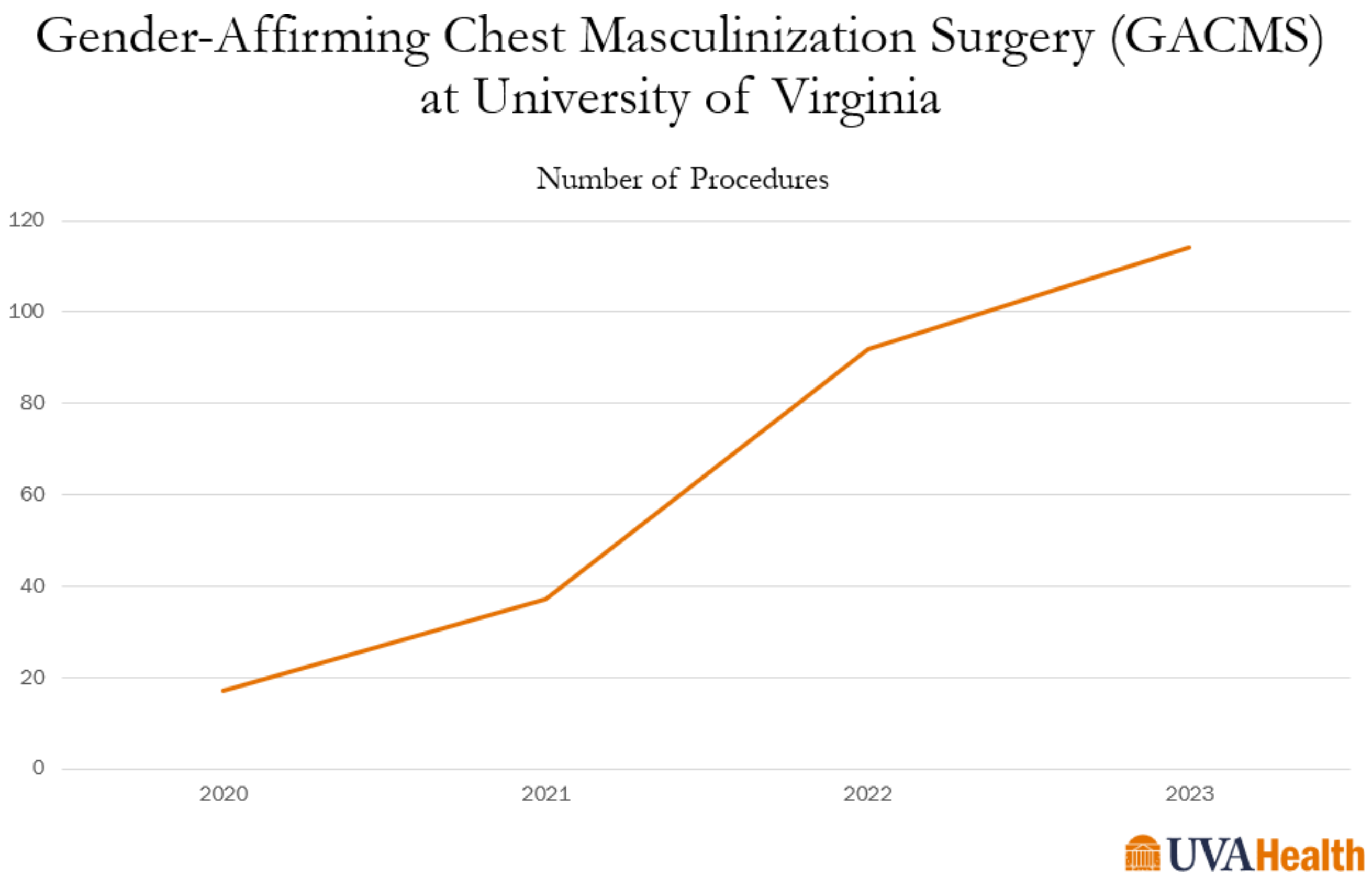


Introduction:

- While the benefits of gender affirming chest masculinization surgery (GACMS) are well-established, ensuring consistent postoperative follow-up is critical for optimal patient outcomes and monitoring for potential complications.
- Socioeconomic factors, such as income level, employment status, and access to health insurance, can directly affect a patient’s ability to engage in regular healthcare (1).
- Additionally, geographic challenges, such as distance from specialized surgical centers may impede consistent follow-up (2).
- Identifying the need for virtual appointments or aid in making in-person appointments could greatly

Purpose: This study aims to identify patients who have undergone chest masculinization surgery and to examine how socioeconomic and geographic differences impact postoperative follow-up adherence and appointment cancellation rates.

Figure 1. Trend of GACMS at the University of Virginia from 2020-2023.



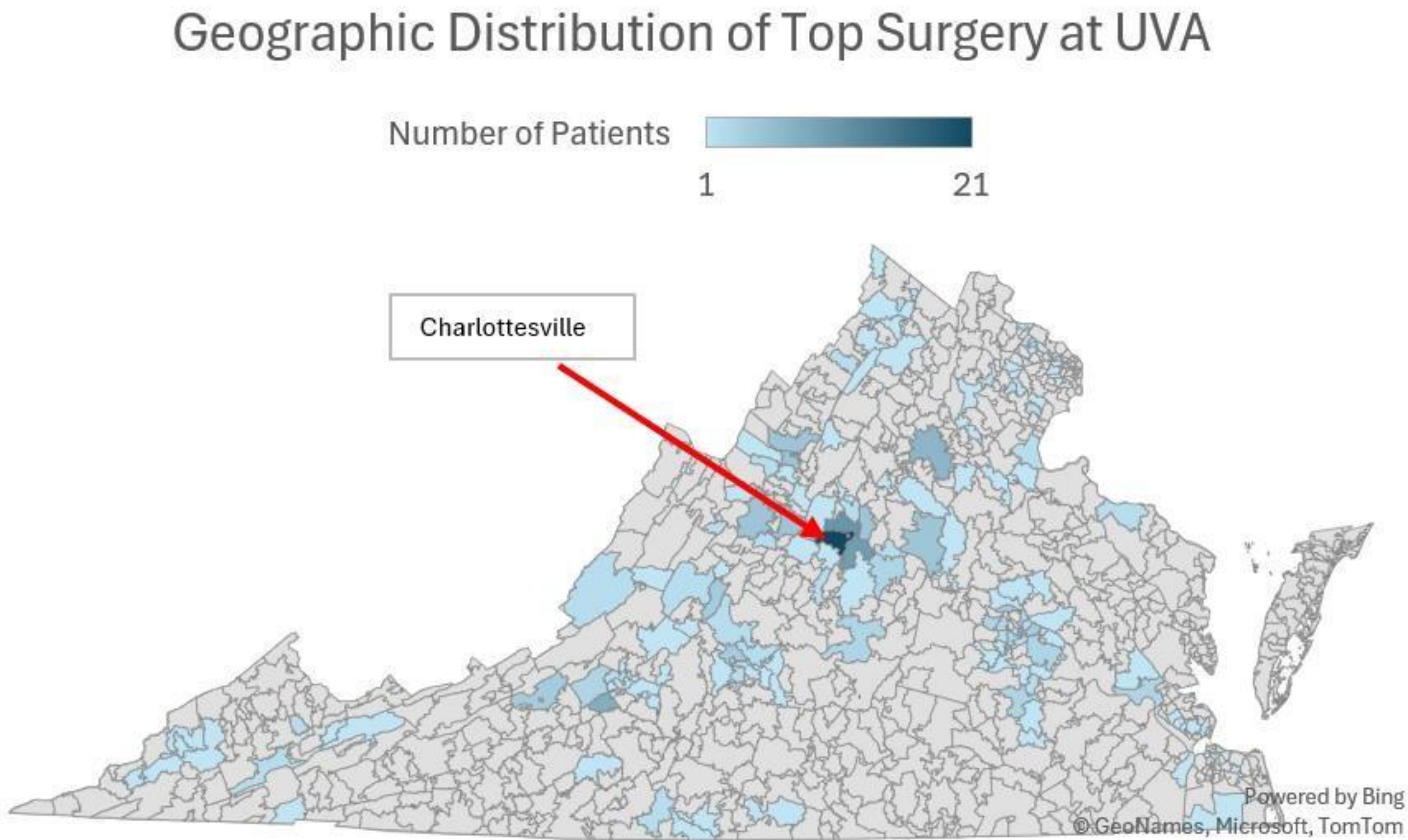
Methods:

- This study was conducted as a retrospective chart review of the electronic medical records of all patients who underwent GACMS between February 2020 and June 2024.
- Geographic data was obtained from patient’s home address. Socioeconomic information for each patient was gathered using their listed zip code, with data such as average household income and population extracted from UnitedStatesZipCode.org.
- Postoperative follow-up data were reviewed and the total number of postoperative appointments was collected for each patient, categorizing visits as either in-person or virtual.
- The average number of each type of appointment (in-person and virtual) and cancellation rates were compared against key variables, including the distance from the hospital, average household income of the patient’s zip code, and population size of their zip code.

Results:

- A total of 310 patients were identified with an average home distance of 81.92 miles from the institution’s hospital with a range of 0.5-743.0 miles.
- A total of 766 in-person follow-up appointments and 137 virtual appointments were completed. 158 patients had at least one canceled postoperative appointment.
- No differences were found in median household incomes of zip codes. However, patients who lived in a zip code of 10,000 people or less had a higher average number of canceled follow-up appointments (p=0.042).
- Patients who lived 50 miles or farther from the main hospital had fewer in-person follow-ups (p=0.026) and more virtual appointments (p=0.001). This fact remained consistent for patients who lived even as little as 20 miles or more from the main hospital (p=0.022).

Figure 2. Geographic distribution of Virginia patients who received GACMS at UVA.



Discussion:

- Although socioeconomic status did not significantly impact follow-up adherence or appointment cancellations in patients undergoing GACMS, geographic factors were associated with higher cancellation rates and a shift toward virtual appointments.
- These findings highlight the need to address geographic barriers to ensure quality postoperative care.

References:

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2. Colakoglu S, Johnson A, Mureau MAM, et al. Telehealth: Could It Be an Avenue to Microvascular Breast Reconstruction for Patients with Geographical Barriers?. *J Reconstr Microsurg.* 2021;37(7):597-601. doi:10.1055/s-0041-1723821